

**TULIA CITY COUNCIL
TUESDAY OCTOBER 13, 2026
AT 6:00 P.M.
TULIA CITY HALL, CITY COUNCIL CHAMBERS**

1. Call to Order and Quorum Call

_____ Dusty George, Mayor	_____ City Manager
_____ Israel 'Bibo' Ramirez	_____ City Secretary
_____ Jed Owens	_____ City Attorney
_____ Robert Bazemore	_____ Electric Director
	_____ Public Works Director
	_____ Chief of Police

2. Presentations and Public Comment (Public Comments is limited to 3 minutes per speaker.)

3. Consider action on the Consent Agenda (usually approval of council meeting minutes will be placed under consent agenda along with non-controversial items that may have already been discussed or routinely handled in the past. This may include resolutions but not ordinances. A council member may remove an item from the consent agenda and place it on the Discussion and Action agenda before a vote on the Consent Agenda items.)

- **CONSIDER AND APPROVE MINUTES FROM THE SEPTEMBER 22nd AND 29th, 2026 MEETINGS**

4. Items for Discussion and Action

- a. **DISCUSS AND CONSIDER APPROVAL ON RESOLUTION 2026-03 ADOPTION OF THE SWISHER COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**
- b. **DISCUSS AND CONSIDER APPROVAL ON CITY PROPERTY BIDS**
 - **Parcel 17848**
High Bid \$558.00
Michael Budde

- **Parcel 17847**
High Bid \$600.00
Peggy Gutierrez

- **Parcel 18374**
High Bid \$800.00
Peggy Gutierrez

- c. DISCUSS AND TAKE ACTION ON RESCHEDULING NOVEMBER'S CITY COUNCIL MEETING DATE.

5. Announcements

- TULIA POWER & LIGHT
- PUBLIC WORKS
- POLICE DEPT
- CITY HALL

6. Adjournment

The City Council of the City of Tulia reserves the right to adjourn into executive session at any time during the course of this meeting to discuss any of the matters listed above, as authorized by Texas Government Code Section 551.071 (Consultation with Attorney), 551.072 (Deliberation about Real Property), 551.073 (Deliberation about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices), and 551.087 (Economic Development)

This agenda was posted on or before October 7, 2026, by 5:00 p.m.

STATE OF TEXAS X

COUNTY OF SWISHER X

CITY OF TULIA X

ON the 22nd day of September 2026, the City Council of the City of Tulia met in special session in the City Council Chambers at 6:00 p.m.

Present were:	Dusty George	Mayor
	Robert Bazemore	Council Member
	Jed Owens	Council Member
	Israel 'Bibo' Ramirez	Mayor ProTem

Also present were:	BJ Potts	City Manager
	Kristina Solomon	City Secretary
	Brian West	Electric Director
	Russell Proctor	Public Works Director
	Paul Brown	Chief of Police

Absent was:	Slater Elza	City Attorney
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1. Call to Order and Quorum Call Work Session

Dusty George called the meeting to order at 6:00 p.m. in the City Council Chambers.

2. Presentations and Public Comment (Public Comment is limited to 3 minutes per speaker.)

- CONSIDER AND APPROVE MINUTES FROM THE AUGUST 11, 2026 MEETING

Robert Bazemore made a motion to approve the minutes as presented. A second was made by Bibo Ramirez and passed with a 4-0 vote.

3. Items for Discussion and Action

- a. DISCUSS AND CONSIDER ACTION REGARDING TULIA ECONOMIC DEVELOPMENT CORPORATION ANNUAL BUDGET FOR FISCAL YEAR 2026-2027

Bibo Ramirez made a motion to approve the 2026-2027 EDC budget. A second was made by Jed Owens and passed with a 4-0 vote.

- b. DISCUSS AND CONSIDER ACTION ON ORDINANCE 2026-01, REGARDING RATES AND CHARGES FOR SANITARY SEWER COLLECTION AND WASTEWATER TREATMENT SERVICES
- c. DISCUSS AND CONSIDER ACTION REGARDING ORDINANCE 2026-02, REGARDING MONTHLY RATES AND CHARGES FOR WATER SERVICES
- d. DISCUSS AND CONSIDER ACTION REGARDING ORDINANCE 2026-03, REGARDING RATES AND CHARGES FOR SOLID WASTE COLLECTION AND DISPOSAL
- e. DISCUSS AND CONSIDER ACTION REGARDING ORDINANCE 2026-04 REGARDING MONTHLY RATES AND CHARGES FOR ELECTRIC SERVICES
- f. CONSIDER AND TAKE APPROPRIATE ACTION REGARDING SANITATION ORDINANCE 2026-05 RELATING TO FUEL SURCHARGE

Jed Owens made a motion to approve Items b-f, Ordinances 2026-01, 2026-02, 2026-03, 2026-04 and 2026-05 relating to rates and charges for utility services. A second was made by Robert Bazemore and passed with a 4-0 vote.

- g. DISCUSS AND CONSIDER ACTION REGARDING ORDINANCE 2026-06, ADOPTING THE 2026-2027 ANNUAL BUDGET

Bibo Ramirez made a motion to approve Ordinance 2026-06 adopting the 2026-2027 budget. A second was made by Jed Owens and passed with a 4-0 vote.

- h. DISCUSS AND CONSIDER ACTION REGARDING ORDINANCE 2026-07, ADOPTING THE PROPOSED TAX RATE OF \$0.3353 PER \$100 OF VALUE

Jed Owens made a motion to approve Ordinance 2026-07 adopting the proposed tax rate of \$0.3353 per \$100 of value. A second was made by Robert Bazemore and passed with a 4-0 vote.

- i. DISCUSS AND TAKE ACTION ON DEPOSITORY CONTRACT EXTENSION-
HAPPY STATE BANK

Bibo Ramirez made a motion to extend the Happy State Bank depository contract. A second was made by Robert Bazemore and passed with 4-0 vote.

- j. DISCUSS AND CONSIDER APPROVAL ON CITY PROPERTY BIDS

- ***Parcel 18531***
High Bid: \$452.00
Ruben Belman

2921 Dale Dr.
Plano, Texas 75074

- **Parcel 18482**
High Bid: \$500.00
Apryll Van Pelt
PO Box 826
Tulia, Texas 79088
- **Parcel 18586**
High Bid: \$500.00
Jolanta Rak
8010 River Rd.
Amarillo, Texas 79108
- **Parcel 19792**
High Bid: \$550.00
Casey James Inman
- **Parcel 18541**
High Bid: \$400.00
Apryll Van Pelt
PO Box 826
Tulia, Texas 79088
- **Parcel 19791**
High Bid: \$650.00
Casey James Inman
- **Parcel 18391**
High Bid \$806
Ruben Belman
2921 Dale Dr
Plano, Texas 75074
- **Parcel 18517**
High Bid \$506
Ruben Belman
2921 Dale Dr
Plano, Texas 75074
- **Parcel 17848**
High Bid \$558
Michael Budde
PO Box 1826
Pagosa Springs, CO 81147

- ***Parcel 18528***
High Bid: \$900.00
Michael Simpson
5401 Shawn Drive
Killeen, Texas 76542

- ***Parcel 18526***
High Bid: \$555.00
Mike Budde (Land4Less LLC)
PO Box 540
Arecibo, PR 00613

- ***Parcel 20728***
High Bid -\$750.00
Christian Guzman
PO Box 168
Tulia, Texas 79088

- ***Parcel 17775***
High bid -\$10,000
Daniel German Rodriguez Moncibais
432 Shandy Ln
La Porte, Texas 77571

- ***Parcel 17847***
High bid -\$600
Peggy Gutierrez
1305 11th
Levelland, Tx 79336

- ***Parcel 19482***
High Bid- \$1,240.00
Tyson Willis
739 N Dallas Ave
Tulia, Texas 79088

Jed Owens made a motion to approve the city property bids presented except a bid for parcel 17775. It did not meet the minimum bid required by council. A second was made by Robert Bazemore and passed with a 4-0 vote.

4. Announcements

- TULIA POWER & LIGHT
- PUBLIC WORKS
- POLICE DEPT
- CITY HALL

5. Adjournment

With no further business to discuss the meeting was adjourned at 6:55 p.m.

ATTEST:

Mayor, Dusty George

City Secretary, Kristina Solomon

STATE OF TEXAS X

COUNTY OF SWISHER X

CITY OF TULIA X

ON the 29th day of September 2026, the City Council of the City of Tulia met in special session in the City Council Chambers at 12:00 p.m.

Present were:	Dusty George	Mayor
	Robert Bazemore	Council Member
	Jed Owens	Council Member

Also present were:	BJ Potts	City Manager
	Kristina Solomon	City Secretary
	Brian West	Electric Director
	Russell Proctor	Public Works Director
	Paul Brown	Chief of Police
	Slater Elza	City Attorney

Absent was:	Israel ‘Bibo’ Ramirez	Mayor ProTem
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1. Call to Order and Quorum Call Work Session

Dusty George called the meeting to order at 12:03 p.m. in the City Council Chambers.

2. Presentations and Public Comment (Public Comment is limited to 3 minutes per speaker.)

3. Items for Discussion and Action

- a. DISCUSS AND CONSIDER APPROVAL ON YEAR END AMENDMENTS
2025-2026 BUDGET

BJ and Sarianne reviewed the year end amendments. See attached for list of amendments.

Robert Bazemore made a motion to approve the amendments as presented. A second was made by Jed Owens and passed with a 3-0 vote.

4. Adjournment

With no further business to discuss the meeting was adjourned at 12:10 p.m.

Mayor, Dusty George

ATTEST:

City Secretary, Kristina Solomon

City of Tulia
Budget Amendments Year End
FYE 9-30-2026

Explanation	Account Name	Account Number	Amount
1. Tulia Fire Dept Pickup	Capital Contributions	100-08-55185	52,450.00
	Misc Revenue VFD	100-44780	52,450.00
2. Trailer Geico	Capital Outlay Street	100-09-55186	1,500.00
	Sale of Property	100-44702	1,500.00
Old trailer totaled and replaced			
3. PU and Bed Fixed GICO Insurance	Insurance Reimbursement	100-44864	3,528.24
2 checks 2093.08 + 1435.16	Maint Motor Vehicles	100-09-53145	3,528.24
4. Closing Costs Donated Property	Misc. Expense	100-00-55000	1,006.00
5. TML Insurance Lightening Water Well	Insurance Reimbursement	200-44864	44,080.63
	Maint Water Wells	200-14-53154	46,580.63
6. 2 Year Audit Fees only budget for one	Special Services	100-05-54143	7,100.00
	Special Services	150-12-54143	7,100.00
	Special Services	200-13-54143	7,100.00
	Special Services	300-42-54143	7,100.00
7. TWDB Grant Expenditures	Engineering Services	200-14-54153	308,000.00
If grant not awarded funds will be transferred to cover the expenditure from Council Contingency fund.	Transfers In	200-44903	308,000.00
8. Fuel	Oil /Gas Supplies	100-07-52123	7,200.00
	Oil /Gas Supplies	100-08-52123	2,800.00
	Oil /Gas Supplies	100-09-52123	3,235.00
	Oil /Gas Supplies	100-11-52123	1,425.00
	Oil /Gas Supplies	150-12-52123	13,525.00
	Oil /Gas Supplies	200-13-52123	2,300.00
	Oil /Gas Supplies	200-14-52123	2,830.00
	Oil /Gas Supplies	200-15-52133	2,100.00
	Oil /Gas Supplies	300-40-52123	500.00
	Oil /Gas Supplies	300-42-52123	5,400.00
9. Var Including Badges for fire dept	Other Supplies	100-08-52134	3,500.00
Fire Dept Cameras, Parking Lot, Misc	Maint Buildings	100-08-53131	6,000.00
Fire Dept Tires, Vehicle repairs	Maint Motor Vehicles	100-08-53145	21,000.00
Fire Dept Fire Works	Special Services	100-08-54143	2,200.00
FundView Accounting Software	Maint Office Equipment	100-20-53142	50,600.00
10. Water Well Golf Course	Maint Water Wells	200-14-53154	15,000.00
11. Maint Other Vehicles	Maint Other Vehicles	150-10-53146	18,000.00
12. Capital Contributions	Capital Contributions	150-12-55185	26,874.00
13. Audit Fee not enough Budgeted Previous Year	Special Services	200-13-54143	3,000.00
14. Postage nothing has been budgeted	Postage	300-42-54140	17,000.00
15. Various	Other Supplies	300-42-52134	3,900.00
	Maint Electric Lines	300-42-53132	4,000.00
	Maint Motor Vehicles	300-42-53145	3,400.00
New Electric Meters	Maint Meters	300-42-53147	25,000.00

Swisher County Hazard Mitigation Plan

**Swisher County,
City of Happy, Kress & Tulia
Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital
District**



**DEVELOPED BY THE SWISHER COUNTY
HAZARD MITIGATION ACTION TEAM
June 2026**

Record of Changes

[illegible]

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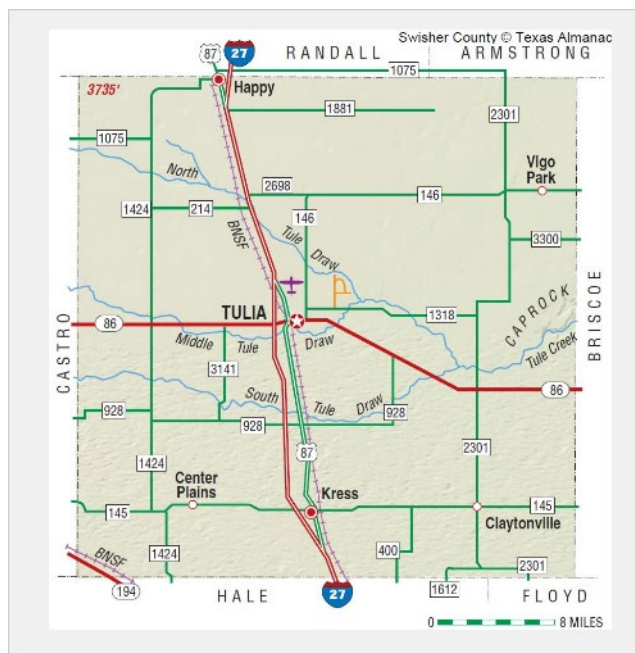
County Demographic Overview:

SWISHER COUNTY is in the transition area between the South Plains and the Panhandle bordered on the east by Briscoe County, on the south by Hale and Floyd counties, on the west by Castro County, and on the north by Randall and Armstrong counties. The center of the county lies at 34°33' north latitude and 100°47' west longitude. Tulia, the county seat, is near the center of the county, seventy miles north of Lubbock and forty-five miles south of Amarillo.

Swisher County occupies 896 square miles of level plains broken only by Tule Creek and its three branches, North, Middle, and South Tule draws. These intermittent streams have no appreciable effect on the terrain until they converge into Tule Creek in the eastern part of the county. In the 1940s North Tule Draw was dammed to impound a small earthen reservoir; in 1974 Mackenzie Dam was completed on Tule Creek in the eastern part of the county, and Mackenzie Reservoir began to form. This lake, made to provide a municipal water supply for Silverton, Lockney, Tulia, and Floydada, became a major recreational facility as well. The soils of Swisher County range from alluvial silts to sandy types mixed with disintegrated rock to form an easily worked earth rich in humus. This soil supports an abundant variety of native grasses as well as wheat, corn, grain sorghum, and cotton crops. The county ranges in elevation from 3,000 to 3,600 feet above sea level, averages 18.94 inches of rain per year, and has an annual growing season averaging 205 days. The average minimum temperature is 24° F in January, and the average maximum is 93° in July. The coldest temperature ever recorded in Texas, -23° F, occurred in Tulia on February 12, 1899.¹

The population of the county is concentrated mostly in the small towns, which include Tulia (population, 4,967), the county seat; Happy (678, partly in Randall County); Kress (715); and the unincorporated area (1,497). Each incorporated town in Swisher County has an Independent School District located within the County. Tulia ISD provides Pre-Kindergarten through 12th grade education to approximately 800 students. Happy ISD provides Pre-Kindergarten through 12th grade education to approximately 253 students. Kress ISD provides Pre-Kindergarten through 12th grade education to approximately 262 students.² Swisher County Hospital District provides medical services for Swisher County.

According to FEMA's National Risk Index, Swisher County's risk index is Very Low when compared to the rest of the U.S. This rating is derived from three components: Expected Annual Loss, Social Vulnerability, and Community Resilience. Swisher County measures as Very Low in Expected Annual Loss, Relatively High in Social Vulnerability, and Very Low in Community Resilience when compared to the rest of the U.S.³



¹ <https://www.tshaonline.org/handbook/entries/swisher-county>

² <https://nces.ed.gov/ccd/districtsearch/>

³ <https://experience.arcgis.com/experience/0a317e8998534c30a9b2d3861c814d42/>

Document Organization

Provided below is a brief explanation of the layout and content of this document:

Element A – The Planning Process

This section explains how the plan was organized and the process followed in developing this document, including:

- Establishing the Mitigation Action Team – Identifies the process Swisher County, the Cities of Happy, Kress, and Tulia, the ISD's, and Swisher County Hospital District followed in establishing their Mitigation Action Team (MAT).
- Establishing an Open Public Process – Identifies actions that the MAT took to encourage public participation during the development of this plan.

Element B – Hazard Identification and Risk Assessment

This section identifies and analyzes the hazards that affect Swisher County and their impacts on the jurisdictions within:

- Hazard Description – Describes the hazards that impact Swisher County, the Cities of Happy, Kress, and Tulia, the ISD's, and Swisher County Hospital District.
- Location - Depicts the areas and jurisdictions affected by this hazard.
- Climate Change – Describes the potential impacts of climate change on each hazard.
- Extent and Previous Occurrences – Provides historical and statistical data related to the specific hazards that have impacts on the jurisdictions within Swisher County.
- Impact – Provides an estimate of the impact the hazard would have on the critical infrastructure located in the County and the jurisdictions within.
- Probability of Future Occurrences – Using the data from the previous occurrences section, calculations on the probability of this hazard affecting the planning area in the future.

Element C – Mitigation Strategies

This section identifies the mitigation goals, objectives, and actions that Swisher County plans to take to mitigate the hazards presented in Element B.

- Development Trends – Provides an analysis of growth trends within the County which were considered in developing the mitigation strategies discussed in Element C.
- Mitigation Goals and Objectives – Provides the framework for the development of the short-term and long-term strategies identified with the Mitigation Actions.
- Mitigation Actions – Describes the actions that each participating jurisdiction proposed to undertake in order to mitigate the impact of future hazard events.

Element D – Plan Maintenance

This section provides a description of the mitigation action plan review and evaluation process.

- Utilizing development patterns and new hazard or risk information; jurisdictions will evaluate progress on the action items and make changes based on new findings.
- Jurisdictions will update the plan and resubmit for approval within 5 years.

Element E – Plan Update

This section discusses plan revisions, considering current progress, new goals, priorities, and development trends.

Element F – Plan Adoption

Plans will be adopted by each jurisdiction through their appropriate governing body. This adoption takes place after plan draft has been approved by state and FEMA applicable content.

Element A – The Planning Process

Plan Preparation (A1)

This hazard mitigation plan was developed through the active participation of representatives from Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, and Swisher County Hospital District. Their contributions were critical in the plan development, especially with their expertise in emergency management, engineering, administrative matters, public works, and building and road maintenance. The team also included stakeholders such as: local business owners, industry representatives, neighboring jurisdictions, regional and state partners. The list of mitigation team members is located on page 15.

The graphic below illustrates the steps taking by the Swisher County MAT in developing this document.

Overview of the Swisher County Planning Process

Organized Assets: Identified and established relationships with existing mitigation authorities and encourages an open public process that extended to:

- MAT Members
- Swisher County and the municipalities therein
- Interested residents from the MAT's participating jurisdictions
- Interested private/non-profit plan stakeholders



Assessed Risks: Conducted a risk assessment by answering the following questions:

- What types of hazards is Swisher County vulnerable to?
- How bad can these hazards get?
- What's being impacts by the identified hazards?
- How will assets in the Swisher County area be impacted by the identified hazards?



Developed the Plan: Developed the HMP based on the risk assessment by:

- Creating goals and objectives
- Developing mitigation action items and prioritizing these actions
- Preparing an implementation and monitoring strategy
- Documenting the mitigation planning process



Implement Plan / Monitor Progress: To promote goal attainment and/or to adjust as needed during the HMP's 5-Year life.

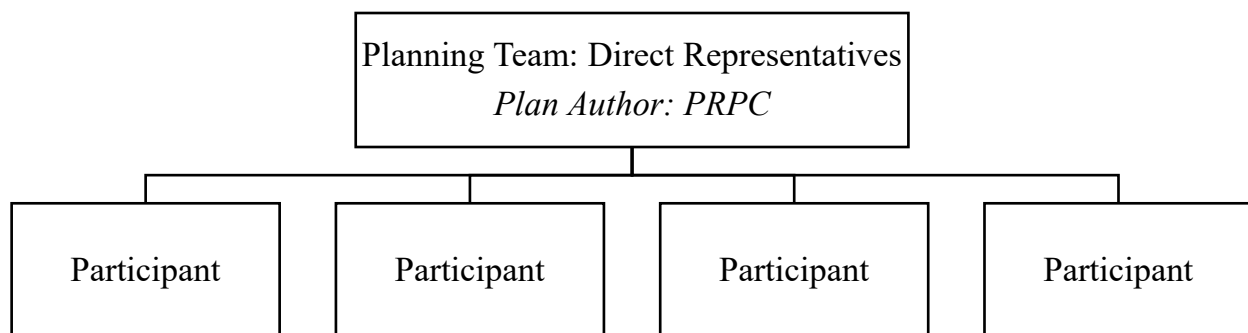
Planning Meetings

Date	Activity Description	Invites / Attendees
3/4/2026	Open meeting with MAT to review hazards, previous mitigation actions, community survey, and hazard impacts	Local government leaders, municipal department heads, ISD administration, responder group leaders, stakeholders, regional and state partners, and neighboring counties.
4/29/2026	Open meeting with MAT to review hazards, previous mitigation actions, community survey, and hazard impacts	Local government leaders, municipal department heads, ISD administration, responder group leaders, stakeholders, regional and state partners, and neighboring counties.
<i>Each full MAT meeting was posted 72 hours in advance at the County Courthouse. Invitations were sent out via email. The public was invited to attend through County Courthouse / City Hall information boards. Sign-in sheets were utilized at both meetings.</i>		

Establishing the Mitigation Action Team (A2)

The previous Swisher County Hazard Mitigation Plan was approved on March 18, 2019. In March 2026, the mitigation team coordinator began the process of updating the plan. This process included reviewing previous mitigation strategies and determining the status of each action. In addition, due to turnover, the chairman began to recruit new members to begin the update process.

Swisher County Mitigation Action Team Hierarchy



At the outset of the planning process, the Swisher County Judge emailed a solicitation to the other jurisdictions and plan stakeholder groups in the County; inviting their participation on the Swisher County Mitigation Action Team (MAT). In addition, the MAT meetings were all well-advertised and the meeting posting encouraged and welcomed the public's participation.

Each of the participating jurisdictions worked to elicit involvement on the MAT from the various groups within their jurisdiction and neighboring communities. Particular focus was placed on inviting participation by the local school districts, neighboring counties, non-profit organizations, and businesses. Overall, the list of agencies/organizations thought to have a direct stake or

interest in this HMP update process or that could somehow inform the planning process are below.

Potential Mitigation Action Team Members		
Swisher County	Agency and Position	Potential Stake, Interest, or Contribution
	Elected Officials <i>County Judge</i> <i>County Commissioners</i>	County officials have a stake in any mitigation actions undertaken by the County and would be responsible for recommending the update's adoption to the Court.
	County Road and Bridge <i>Superintendent</i>	Road and Bridge could inform the MAT on the impacts of natural hazards on the county's roads and have input on the development of mitigation actions.
	Sheriff's Office <i>County Sheriff</i>	Sheriff's Office could inform the MAT on public safety issues related to natural hazards and have input on the development of mitigation actions.
	County Appraisal District <i>Chief Appraiser</i>	The Appraisal District could inform loss value determinations made by the MAT
	Office of Emergency Management <i>County Judge</i>	The OEM could provide mitigation ideas, and presumably, would be charged with carrying out a number of the mitigation actions.
	Hospital District <i>Hospital Administration</i>	The hospital could both inform the MAT and has a direct interest in the HMP's mitigation measures, particularly those that apply to mass casualties. Additionally, the hospital has a direct connection to underserved and socially vulnerable populations within the County.
Cities of Happy, Kress, and Tulia	Elected Officials <i>Mayor</i>	City officials have a stake in any mitigation actions undertaken by the City and would be responsible for recommending the update's adoption to the Council.
	City Administration <i>City Manager</i>	City administration has a stake in any mitigation actions taken by the City and would be responsible for recommending the update's adoption to the Council.
	Public Works <i>Public Works Director</i>	Public works personnel could provide detail on how hazards and mitigation actions could impact the City utility and water treatment systems.
	Fire Department <i>Fire Chief</i>	The fire department could both inform the MAT and has a direct interest in the HMP's mitigation measures, particularly those that apply to wildfires.
ISDs	ISD <i>Superintendent</i>	Being a stakeholder in the hazard mitigation plan, the ISD has a direct interest in the mitigation measures listed in the plan and is eligible to apply for mitigation funding.
Local Partners and Industry	Economic Development <i>EDC Director</i>	The EDC could inform the MAT on future economic development trends for the County.
	Texas AgriLife Extension <i>County Extension Agent</i>	AgriLife could inform the MAT on some of the decisions that might impact area farmers and ranchers and help promote certain mitigation actions. Additionally, the County Extension Agent is a representative of Texas A&M.
	Industry/Business	Industry in the County has a direct interest in the development of this HMP.
	The Public	The residents of the planning area have a direct interest in the outcome of this planning process.
	COG – PRPC <i>Regional Services Director</i>	Aside from assisting the MAT in writing this update, the PRPC could provide data that would inform the actions / decisions of the MAT.
	Lubbock WFO (NWS) <i>Warning Coord. Met.</i>	The NWS could provide data on past storm events and damages as well as forecasted weather treats that could inform the formation of mitigation actions.
Regional,	Texas Forest Service <i>Regional Fire Coord.</i>	TFS resources could inform the MAT's development of wildfire mitigation actions.

Texas Parks and Wildlife <i>Lake Meredith Director</i>	Texas Parks and Wildlife resources could inform the MAT's development of wildfire mitigation actions.
Army Corps of Engineers <i>SW Div., Fort Worth, TX</i>	Army Corps of Engineers resources could inform local flood control efforts with streambed/wetland data.
Texas State Data Center (TSDC) <i>Online resources</i>	TSDC resources could provide data to forecast future population growth in the planning area.
Texas Water Development Board <i>Online resources</i>	Texas Water Development Board resources could provide the City with severe repetitive loss data and inform actions focused on drought contingencies.

All of the participating jurisdictions/stakeholders listed above played a part in the hazard mitigation plan update process. State and federal agency participation was primarily obtained through the use of their websites. Information was collected from their sites to develop the hazard profiles found later in this document, to estimate future hazard impacts, to project future growth and development, and to identify potential actions that could be employed in mitigating the impacts of future hazard events in the planning area.

The MAT planning process was open throughout and with active participation from the public in all the meetings. Only 5 people participated from the planning area in the Household Natural Hazards Preparedness Survey, even though the survey was posted on several local news pages. The attitudes and opinions reflected by the resident responses were considered as the mitigation actions in this HMP update were being developed. Each participant was able to enter their zip code to separate results by jurisdiction.

In following FEMA's Local Mitigation Planning Handbook suggestions, the individuals invited to participate on the MAT brought certain skill sets or experiences to the process that helped to ensure the overall relevance of the plan. The types of MAT member contributions included:

- Emergency Managers/First Responders – Direct experience with past hazard events and existing preparedness measures, and/or had a direct line of communication with the State emergency management agency.
- Local Community Planners – Able to assist the planning team in understanding current and future community development trends, the policies or activities that affect development, and the relationship between hazards and development.
- Mapping Specialists – Able to analyze and interpret map data to support the planning process and communicate complex information, such as the locations of assets at risk in hazard-prone areas and estimates of damage for a particular disaster scenario.
- Public Works/Engineering Staff – Able to identify current or projected problems for the community's infrastructure that could be addressed through capital improvements supported by the mitigation plan.

- Elected and Executive Officials – Familiar with the total needs of their jurisdictions and were able to communicate how the mitigation plan could support other social, economic, or environmental goals locally.
- Floodplain Administrators – Able to provide information on local flood hazard maps, floodplain ordinance and actions that could be undertaken to support the goals of the National Flood Insurance Program and help reduce flood losses.
- Code Enforcement Officials – Able to help the team understand how local codes can be used in support of the Swisher County plan's mitigation goals.
- State/Federal Partners – Able to serve as a data resource; providing the MAT with relevant statistics, historical account, etc. that could be used to inform the planning process.

The table on the next page lists the current membership of the MAT and describes the contributions each member made with the development of this document.

Swisher County Mitigation Action Team and Contributions		
Title	Jurisdiction	Contribution
County EMC/Team Coordinator	Swisher County	<i>Emergency Manager</i> ; coordinated the meetings, obtained data to profile hazards, provided background on past mitigation actions in the county; identified potential mitigation actions
County Judge	Swisher County	<i>Elected Official</i> ; helped the MAT in discerning the political element in the assessments of potential mitigation actions and with the development of mitigation actions
County Sheriff	Swisher County	<i>Law Enforcement</i> ; familiarized the MAT with the County's law enforcement prevention activities and assisted with the development of mitigation actions
Mayor	City of Kress City of Tulia	<i>Elected Official</i> ; helped the MAT in discerning the political element in the assessments of potential mitigation actions and with the development of mitigation actions
City Manager	City of Tulia	<i>Executive Official</i> ; helped the MAT in discerning the legal element in the assessments of potential mitigation actions and with the development of mitigation actions
City Secretary	City of Kress	<i>Executive Official</i> ; helped the MAT in discerning the legal element in the assessments of potential mitigation actions and with the development of mitigation actions
Fire Chief	City of Kress City of Tulia	<i>First Responder</i> ; assisted with gathering wildfire data and identification of potential wildfire mitigation actions
Police Chief	City of Tulia	<i>First Responder</i> ; assisted with gathering law enforcement data and identification of potential mitigation actions
Electric Director	City of Tulia	<i>Public Works Staff</i> ; assisted with gathering wildfire data and identifying electrical issues within the planning area
City Commissioner	City of Happy	<i>Elected Official</i> ; helped the MAT in discerning the political element in the assessments of potential mitigation actions and with the development of mitigation actions
Superintendent	Kress ISD	<i>ISD Representative</i> ; actively participated in the MAT meetings and assisted with the development of mitigation actions for the ISD
Principal	Happy ISD	<i>ISD Representative</i> ; actively participated in the MAT meetings and assisted with the development of mitigation actions for the ISD
Hospital CEO	Swisher County Hospital District	<i>Healthcare</i> ; actively participated in meetings and assisted with the development of mitigation actions for the county.

Establishing an Open Public Process (A3)

As previously noted, the development of this plan followed the requirements set out by FEMA under 44 CFR §201.6. One of the foundational pieces of those requirements calls for the public to be given ample opportunity to observe, if not participate, in the planning process. §201.6(b)(1) required the County to provide, “(1) *An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;*”. The following is a sample of the public notice:

NOTICE TO THE PUBLIC (Sample)

The Swisher County Hazard Mitigation Team will conduct a public meeting at the Swisher County Annex located at 310 W. Broadway, Tulia, TX on Wednesday, March 4, 2026 at 10:00am. This plan incorporates mitigation actions intended to minimize the impacts of certain natural hazards on the residents of the County. The meeting is open to the public and members of the community are encouraged to attend. We especially encourage participation from groups that may be disproportionately affected by hazards, including but not limited to low-income families, elderly individuals, people with disabilities, and minority communities. Your insights and experiences are crucial for shaping a plan that effectively addresses the needs of all residents. For questions or comments, please contact Abby Sanders with the PRPC at 806-372-3381.

The draft was made available for public comment both electronically, through PRPC, and physically at the Courthouse in Tulia, the City Halls in Happy, Kress, and Tulia, and the Happy, Kress and Tulia ISD administration buildings, 72 hours in advance of the governing bodies’ meetings. The final draft was discussed in open session during those meetings, with a call for public comment, before the adopting resolutions were considered and passed. Additionally, the public was provided a link to view the plan with instructions to contact the EMC or the Emergency Management Planner with the PRPC with any feedback. These adoption meetings were preceded with a Notice to the Public that generally read as follows:

NOTICE TO THE PUBLIC ON THE ADOPTION OF THE SWISHER COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN (Sample)

Swisher County Commissioner’s Court will conduct a public meeting before considering final adoption of the recently completed 2026 Swisher County Hazard Mitigation Plan Update on (date), at (time), in the (meeting room) of the Swisher County Courthouse located at 119 S Maxwell Ave., Tulia, TX 79088. This plan incorporates mitigation actions intended to minimize the impacts of certain natural hazards on the residents of the planning area. A copy of the plan is now available for review in the Swisher County Courthouse, during normal business hours or online at: [link]. The meeting is open to the public and interested residents are encouraged to attend to offer feedback and comment.

Each jurisdiction posted their own customized notice; giving residents the date/time on which their governing body would consider the plan adoption along with a location at which the plan could be physically reviewed locally.

The Swisher County Hazard Mitigation Plan will remain available through PRPC until it’s replaced by the next 5-year update.

Existing Document Reviewed for Plan Development (A4)

Documents and Databases	Information Retrieved
State of Texas Hazard Mitigation Plan	Help in identifying specific hazards for the participants
Swisher County EOP	Mitigation and recovery operations for the participants
Texas A&M Forest Service Fire Reports	Fire reports for the county and fire behavior maps
Google Maps	Maps identifying county and state roads
NOAA Storm Event Database	Data to populate storm history for the last 10 years
FEMA Flood Map Center	Details on the county and city's involvement in NFIP
Texas Water Development Board	Data regarding the participants existing water sources
Natural Disasters and Weather Extremes	Data to populate storm history for the last 10 years
FEMA Disaster Declarations	Data to expand on historical weather disasters
US Census American Fact Finder	Data regarding county and city census
Texas Association of Counties Profiles	Detailed information on the county's history

A capability review was completed by key departments and provided information pertaining to existing plans (see above), policies, ordinances, and regulations to be integrated into the goals and objectives of the Plan. These plans informed the mitigation action team of the jurisdictions' current operations and goals so members would be fully informed when planning for hazard mitigation.

Element B – Hazard Identification and Risk Assessment (B1, B2, B3)

The purpose of hazard mitigation is to reduce loss of life and property by minimizing the impact of disasters. Mitigation plans are key to breaking the cycle of disaster damage and reconstruction. This mitigation plan will identify natural hazards that impact our community and identify actions to reduce losses from those hazards and establish a coordinated process to implement the plan.

Hazard Analysis

Early in the update process, the committee completed an analysis of the plan and decided that much of the contents on hazard analysis remained relevant. As with the previous plan, the committee for this update found the following natural hazards continue to be present and could have an effect to the planning area.

- Drought
- Flooding
- Hail Storms
- Lightning
- Tornado
- Wildfire
- Windstorms
- Winter Storms

The mitigation action team studied the entire list of possible natural hazards that could affect the jurisdiction and found that while some hazards could be considered, historical data did not support the need to include the following hazards. Data of the following hazards found that the possibility of a future event would have less than a 1.5% chance of occurring in the next 65 years, therefore, the risk is negligible; or that history has never recorded any such event for the jurisdiction and the event is not likely to occur in the next 5 years. There is not any history of impacts from these hazards, therefore, the team does not anticipate any impacts from these hazards in the future.

- Earthquake
- Hurricanes
- Tropical Storms
- Coastal Erosion
- Expansive Soils
- Land Subsidence

Some of these interconnected (e.g., lightning striking transformers starting wildfires) while some hazards could be characterized as elements of a broader hazard agent. For example, hail and severe winds can be produced by thunderstorms, and they may all occur during a single thunderstorm event. It should also be noted that some hazards, such as severe winter storms, may impact a larger area but cause little damage, while other hazards, such as a tornado, may impact a smaller area but cause extensive damage.

Climate Change

Climate change is described as a significant change in either the average state of the climate or in its variability over an extended period of time. Climate change in and of itself is not necessarily a hazard, but it may increase the frequency and/or intensity of identified hazards over time.

Climate change could affect communities in a variety of ways, but it is currently unclear what extent the impacts will have on the Planning Area. It is anticipated that hazard-causing events will fluctuate due to climate change over time. As new information and new models are developed, a climate change risk assessment may be enhanced to measure and assess these impacts more accurately.

Industrial/Technological/Man-Made Hazards

The MAT recognizes the significance of industrial, technological, and man-made hazards that pose a threat to both residents and property. Specific plans that address the recognition and response procedures of those hazards can be found in the following documents:

- Swisher County EOP
- Aviation Disaster Plan/Mass Fatality Plan
- Train: BNSF Railroad Response Plan
- Community Emergency Response Plan
- Pipeline Emergency Response Guidelines
- Regional Foreign Animal Disease Plan

Industrial / Technological / Man-Made Hazards Found in the Planning Area				
Hazard	Frequency of Occurrence	Warning Time	Geographic Extent	Potential Impact
Hazardous Materials Release	Likely	None	Multi-County	Moderate
Pipeline Explosion	Likely	None	Localized	Limited
Railcar Incident	Likely	None	Multi-County	Limited
Potable Water Failure	Likely	Less than 1 hour	Localized	Moderate
Aircraft Accident	Unlikely	None	Multi-County	Limited
Foreign Animal Disease	Highly Likely	More than 12 hours	Regional	Major

Drought

Description

Drought is a deficiency in precipitation over an extended period. It is a part of the normal climate variability in many climate zones. The duration of droughts varies widely. Drought can develop quickly and last only for a matter of weeks, exacerbated by extreme heat and/or wind, but more commonly drought can persist for months or years.

Droughts are classified as one of the following three types:

- Meteorological – based on the degree of dryness (rainfall deficit) and the length of the dry period.
- Hydrological – based on the impact of rainfall deficits on the water supply such as stream flow, reservoir, and lake levels, and ground water table decline.
- Agricultural – based on the impacts to agriculture by factors such as rainfall deficits, soil water deficits, reduced groundwater, or reservoir levels needed for irrigation.

Anticipating the range of future droughts that could impact the entire planning area, the MAT then considered the effects those events might have. The table on the next page describes the impacts each stage of drought could potentially have on the planning area.

The Drought Monitor map, a collaborative effort from the National Drought Mitigation Center (NDMC), the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Department of Agriculture (USDA), identifies areas of drought and labels them by intensity.

D1 is the least intense level and D4 is the most intense. Drought is defined as a moisture deficient bad enough to have social, environmental, or economic effects. D0 areas are not in drought, but are experiencing abnormally dry conditions that could turn into drought or are recovering from drought but are not yet back to normal.

The Drought Monitor also indicates whether primary physical effects are for short- or long-term drought using letters:

- **S** = Short-term, typically less than 6 months (agriculture, grasslands)
- **L** = Long-term, typically more than 6 months (hydrology, ecology)
- **SL** = Area contains both short- and long-term impacts

Short-term drought indicator blends focus on 1-3 month precipitation. Long -term blends focus on 6-60 months. Additional indices used, mainly during the growing season, include the USDA/NASS Topsoil Moisture, Keetch-Byram Drought Index 9KBDI), and NOAA/NESDIS satellite Vegetation Health Indices. Indices used primarily during the snow season and in the West include snow water content, river basin precipitation, and the Surface Water Supply Index (SWSI). Other indicators include groundwater levels, reservoir storage, and pasture/range conditions.

Drought Severity Classification⁴

			Ranges				
Category	Description	Possible Impacts	Palmer Drought Severity Index (PDSI)	CPC Soil Moisture Model (Percentiles)	USGS Weekly Streamflow (Percentiles)	Standardized Precipitation Index (SPI)	Objective Drought Indicator Blends (Percentiles)
D0	Abnormally Dry	Going into drought: short-term dryness slowing planting, growth of crops or pastures Coming out of drought: some lingering water deficit, pastures or crops not fully recovered	-1.0 to -1.9	21 to 30	21 to 30	-0.5 to -0.7	21 to 30
D1	Moderate Drought	Some damage to crops and pastures, streams, reservoirs, or wells low, some water shortages developing or imminent, voluntary water-use restrictions requested	-2.0 to -2.9	11 to 20	11 to 20	-0.8 to -1.2	11 to 20
D2	Severe Drought	Crop or pasture loss likely, water shortages common, water restrictions imposed	-3.0 to -3.9	6 to 10	6 to 10	-1.3 to -1.5	6 to 10
D3	Extreme Drought	Major crop/pasture losses, widespread water shortages or restrictions	-4.0 to -4.9	3 to 5	3 to 5	-1.6 to -1.9	3 to 5
D4	Exceptional Drought	Exceptional and widespread crop/pasture losses, shortages of water in reservoirs, streams, and wells creating water emergencies	-5.0 or less	0 to 2	0 to 2	-2.0 or less	0 to 2

⁴ <https://droughtmonitor.unl.edu/About/AbouttheData/DroughtClassification.aspx>

The Drought Monitor has developed a list of impacts reported during past droughts in each state for each level of drought defined above. The impacts listed below have been historically observed in Texas during past droughts.

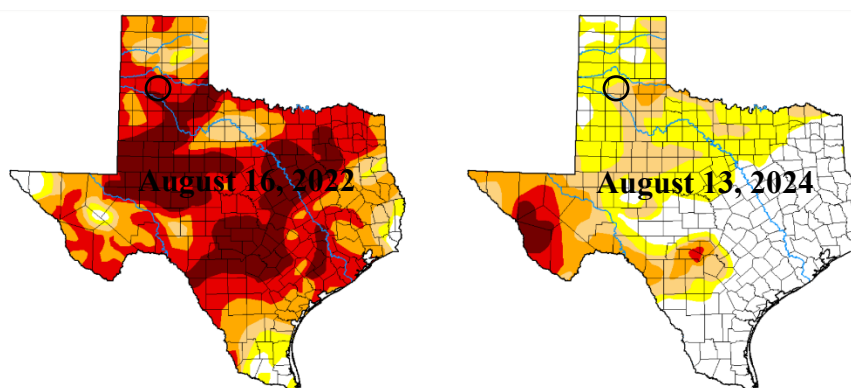
Category	Historically Observed Impacts in Texas
D0	Producers begin supplemental feeding for livestock
	Planting is postponed; forage germination is stunted; hay cutting is reduced
	Grass fires increase
	Surface water levels decline
D1	Dryland crops are stunted
	Early cattle sales begin
	Wildfire frequency increases
	Stock tanks, creeks, streams are low; voluntary water restrictions are requested
D2	Pasture conditions are very poor
	Soil is hard, hindering planting; crop yields decrease
	Wildfire danger is severe; burn bans are implemented
	Wildfire moves into populated areas
	Hydroelectric power is compromised; well water use increases; mandatory water restrictions are implemented
D3	Soil has large cracks; soil moisture is very low; dust and sand storms occur
	Row and forage crops fail to germinate; decreased yields for irrigated crops and very large yield reduction for dryland crops are reported
	Need for supplemental feed, nutrients, protein, and water for livestock increases; herds are sold
	Increased risk of large wildfires is noted
	Many sectors experience financial burden
	Severe fish, plant, and wildlife loss reported
	Water sanitation is a concern; reservoir levels drop significantly; surface water is nearly dry; river flow is very low; salinity increases in bays and estuaries
D4	Exceptional and widespread crop loss is reported; rangeland is dead; producers are not planting fields
	Culling continues; producers wean calves early and liquidate herds due to importation of hay and water expenses
	Seafood, forestry, tourism, and agriculture sectors report significant financial loss
	Extreme sensitivity to fire danger; firework restrictions are implemented
	Widespread tree mortality is reported; most wildlife species' health and population are suffering
	Devastating algae blooms occur; water quality is very poor
	Exceptional water shortages are noted across surface water sources; water table is declining
	Boat ramps are closed; obstacles are exposed in bodies of water; water levels are at or near historic lows

Climate Change

Climate change and drought are related on a larger, regional level and has further altered the natural pattern of droughts, making them more frequent, longer, and more severe. Since 2000, the western United States has experienced some of the driest conditions on record. The southwestern US, in particular, is going through an unprecedented period of extreme drought, and the planning area is on the eastern edge of the region. This will have lasting impacts on the environment and those who rely on it.⁵

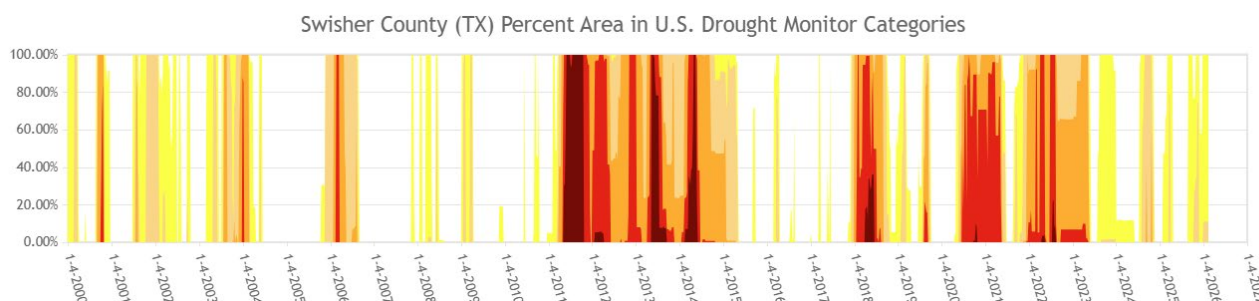
Location

Drought affects the entire region, including Swisher County and the jurisdictions within. This graphic depicts drought conditions across the State of Texas and allows you to compare conditions in 2022 with those in 2024. The Panhandle region typically cycles through periods of drought every few years. The color gradients on this graphic are described in the Drought Severity Classification Chart on the previous page.



Extent and Previous Occurrences

The entire planning area experienced exceptional (D4) drought conditions from 2011 to 2014, partially due to the limited amount of rainfall in 2011, 8.53 inches for the year.⁶ These drought conditions were sustained each consecutive year through April 2015 with continued below average precipitation. Swisher County has been experiencing cycles of drought since January 2018. The entire region can experience up to D4 drought conditions. The chart below depicts these instances from 2000-2026.



⁵ <https://www.usgs.gov/science/science-explorer/climate/droughts-and-climate-change>

⁶ <https://www.weather.gov/wrh/Climate?wfo=lub>

Below is a list of each occurrence of drought from 2006 to 2025. Swisher County experienced at least D1 drought conditions in 2006, 2011 to 2014, and a majority of 2018, 2020, 2021, and 2022.

Location	Date	Event Type	Damage	Damage Impact Narrative
County	1/1/2006 to 8/1/2006	Drought	\$0	In October of 2005, an abnormally long dry period began for the region. Much of the region quickly fell into a severe drought (D2) after more than 31 days without precipitation. A series of widespread rain events hit the region in July of 2006, bringing most of the region out of severe drought.
County	4/2011 to 9/2014	Drought	\$3B	2011 was one of the driest and hottest years on record, breaking multiple high temperature records and the County only receiving 8.53 inches of rain. In 2012, the Panhandle experienced the second warmest year on record. Precipitation was nearly double the amount received in 2011, but still 50% below normal amounts. Beneficial late-winter and early-spring rains helped most of the area see short term recovery from the ongoing drought, though a dry summer and autumn left mostly extreme (D3) drought conditions across the Panhandle. In 2013, the planning area saw a blizzard that dumped 12" of snow in two days and a summer wet pattern. This led to an improvement in drought conditions to Abnormally Dry (D0) for several months, but a dry fall and winter returned the area to Severe Drought (D2). By April 2014, the entire County was in an Exception Drought (D4) again. The drought eased up in the Summer of 2014 with several rounds of rain, and by the fall, the region was out of drought conditions.
County	1/2018 to 8/2018	Drought	\$0	A moderate La Nina in the fall of 2017 created dry conditions and led to the emergency of D3 drought conditions in January 2018. Continued reduced precipitation exacerbated the drought through the spring and summer months until a widespread rainfall event in August brought the area out of drought conditions.
County	7/2020 to 6/2021	Drought	\$0	Below normal rainfall in the spring and summer months led to drought conditions once again. Dryland crops had mostly failed by June with lack of rainfall, extreme heat, and hail storms destroying crops.
County	12/2021 to 8/2022	Drought	\$0	Extreme drought (D3) conditions returned to the region. These conditions were tied to a mature moderate strength La Nina which led to several drier than average months. The grassland fuels dried out very quickly, increasing wildfire potential throughout the winter and spring. Summer brought several rain events which pulled the region out of the drought conditions.
TOTAL		\$0	\$0	

Impact

Drought conditions can have many impacts in the planning area. Specific vulnerabilities for each stakeholder in the plan are listed below.

Vulnerabilities	
County	• All residents/homes/property are vulnerable to the secondary impact of drought, wildfire. Grassland is susceptible to catch on fire from sparks from cigarette butts and transformer malfunctions with little to limited structures to stop the spread. • Vegetation around the Courthouse and other county-owned buildings • Crops and agricultural economy: crop damage and decreased cattle profits are likely to occur in the event of a drought.
Kress	• Vegetation around City buildings and facilities • Decreased production from water wells.
Happy	• Vegetation around City buildings and facilities • Decreased production from water wells.
Tulia	• Vegetation around City buildings and facilities • Decreased production from water wells.
KISD	• Kress ISD campus does not have drought resistant vegetation and are vulnerable to dry conditions. The impact of drought to the ISD is increased water use to maintain the existing landscape.
HISD	• Happy ISD campus does not have drought resistant vegetation and are vulnerable to dry conditions. The impact of drought to the ISD is increased water use to maintain the existing landscape.
TISD	• Tulia ISD campuses (3) do not have drought resistant vegetation and is vulnerable to dry conditions. The impact of drought to the ISD is increased water use to maintain the existing landscape.
SCHD	• Vegetation around Hospital buildings and facilities

Probability of Future Events

Historical patterns are assumed to be a dominant factor in determining future drought events. Based upon the historical instances of drought events in the last 20 years, droughts of D1 or greater magnitude, occurring for at least two consecutive weeks have happened in 648 out of a total of 1,040 weeks. Based on this data, the MAT estimates the probability for a drought in the entire planning area in any given year to be 62.30% Due to the rural nature of the planning area, changes in population patterns, land use, and development will not affect the impact of this hazard.

Years in the Record Span 2006-2025	# of Weeks Total 2006-2025	# of Weeks in the Span in which the Event Occurred⁷	Computation	Future Probability of at least 2 Weeks of D1 Drought
20	1,040	648 weeks	$(648/1,040) \times 100$	62.30% each year

⁷ <https://droughtmonitor.unl.edu/DmData/DataDownload/WeeksInDrought.aspx>

Flooding

Description

A flood is defined as a general and temporary condition of partial or complete inundation of two or more acres of normally dry land or of two or more properties from:

1. Overflow of inland or tidal waters; or
2. Unusual and rapid accumulation or runoff of surface waters from any source; or
3. Mudslides (i.e., mudflows)

A flood typically inundates a floodplain. There are two categories of flooding that could potentially impact the planning area:

- Flash Floods – A flash flood generally results from a torrential rain on a relatively small drainage area. Runoff from these intense rainfalls result in high flood waters that can destroy roads, bridges, homes, buildings, and other community developments. Discharges quickly reach a maximum and diminish almost as rapidly. Flash floods are a potential source of destruction and a threat to public safety in areas where the terrain is steep, surface runoff rates are high, streams flow in narrow canyons and gullies, or severe thunderstorms stall over an area. The historical instances of flooding that have occurred within the planning area are mostly flash flood types of events. Therefore, flash flooding will be addressed within this plan.
- Riverine Floods - Riverine floods are caused by precipitation over large areas and differ from flash floods in their extent and duration. Riverine floods take place in river systems whose tributaries may drain large geographic areas and encompass many independent river basins. Floods in large river systems may continue for periods ranging from a few hours to many days. Flood flows in large river systems are influenced primarily by variations in the intensity, amount, and distribution of precipitation.

Location

During heavy rainfall events, flash flooding can impact the entire planning area. The County has been mapped through the FEMA FIRM program in 1987, the City of Kress was mapped in 1975, Happy in 2007, and Tulia in 1988.

- In the unincorporated area of the County, there are several county roads that wash out each year, making them impassible and in need of continuous repairs, including: US-87 going under the Railroad track and the intersections of County Road 16 and HWY 1318.
- In the City of Happy, flooding occurs at the intersection of Main St. and the Railroad tracks. Arnie Road is also closed often due to flooding.
- In the City of Kress, flooding occurs on I-27 which ends up affecting the entire city due to runoff. 7th St and Paul St both see occasional flooding as well.
- In the City of Tulia, N. Dallas St and S Austin St have experienced flooding.
- All three ISDs are impacted by the flooding issues depicted in the County and City flooding locations. Please see below for maps of the schools.
- Swisher County Hospital District can see flooding around the Hospital, including the grounds and parking lots.

Kress ISD Service Area



Kress ISD Campus



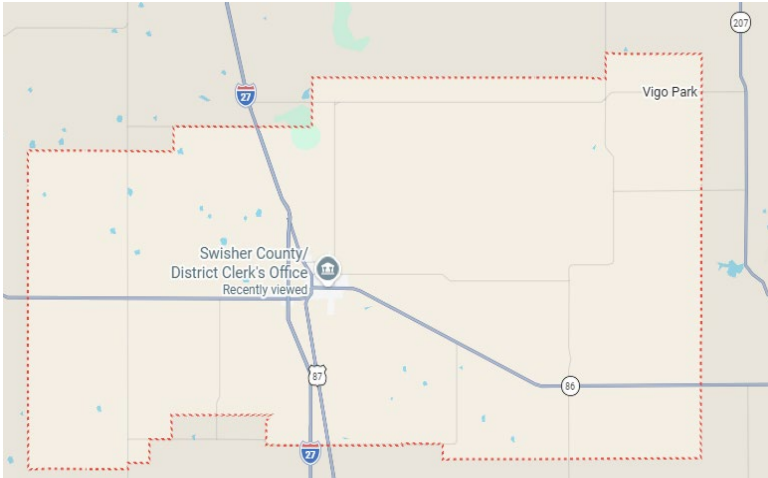
Happy ISD Service Area



Happy ISD Campus



Tulia ISD Service Area



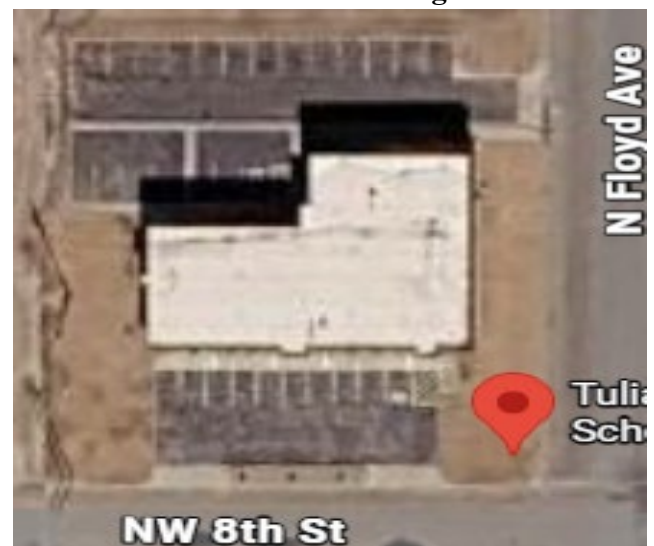
Tulia Elementary School



Tulia Junior/High School



Tulia Administration Building



Swisher County Hospital District Campus



Climate Change

Climate change can affect the intensity and frequency of precipitation on a global scale. Warmer oceans increase the amount of water that evaporates into the air. When more moisture-laden air moves over land or converges into a storm system, it can produce more intense precipitation, for example heavier rain. This can lead to flooding at the local level. However, heavy precipitation does not necessarily mean the total amount of precipitation at a location has increased – just the precipitation is occurring in more intense events. The impacts of climate change on flooding at the local level is somewhat understood, but more research is needed to examine the full impact.

Extent and Previous Occurrences

Flooding extent that occurs in Swisher County is approximately 2-5 feet. The severity of a flash flood depends not only on the amount of water that accumulates in a period of time, but also on the land's ability to manage the water. Below is a list of previous flooding occurrences.

Location	Date	Type	Property Damage	Damage Impact Narrative
Tulia	8/22/2006	Flash Flood	\$0	Portions of HWY 86 east of Tulia had to be closed due to flowing flood waters. More than 6 inches of running water was over the roadway.
Kress	4/16/2009	Flood	\$500K	Floodwaters 5.27 inches caused multiple vehicles to become stranded between Tulia and Kress.
Tulia Airport	6/12/2012	Flood	\$0	Very heavy rain flooded many side roads and intersections in Tulia. The Highway 87 underpass was temporarily closed after being inundated with 2 feet of water.
Kress	6/14/2012	Flood	\$200K	Widespread flooding happened in Swisher County. 700 acres of crops were heavily damaged.
Kress	7/20/2015	Flood	\$150K	3.1 inches of water caused varying degrees of crop damage in Swisher County.
Tulia Airport	8/22/2017	Flash Flood	\$0	Water up to 5 feet deep caused the underpass at the junction of State HWY 86 and 87 in Tulia to close.
Happy	10/8/2018	Flood	\$0	Torrential rainfall caused road closures when 3 feet of water covered FM 179.
Tulia Airport	5/7/2019	Flash Flood	\$0	Several county and farm to market roads were found to have roughly 4-5 feet of flowing water over the roadways.
Tulia Airport	7/27/2020	Flash Flood	\$0	Intense rainfall from training thunderstorms produced flash flooding in and around Tulia. Law enforcement reported that a vehicle had become stalled due to flooding along Interstate 27/US Highway 87 underneath the Texas Highway 86 overpass.
Eunice	6/3/2023	Flash Flood	\$0	Roads in town were flooded due to intense rainfall.
Happy	4/23/2025	Flash Flood	\$0	Roads in Happy were flooded due to intense rainfall from a slow-moving storm.

Kaffir	6/6/2025	Flash Flood	\$0	Water was reported over several roads in and around Tulia and the County.
TOTAL		12 events	\$850K	

Impact

The depth of any flooding event will be dependent upon factors such as the location, intensity, and duration of the rainfall event, the affected watershed(s), the jurisdiction's Special Flood Hazard Areas (SFHAs), the local drainage system, and other meteorological conditions. Vulnerable properties and facilities could sustain repeated damage due to rainfall that exceeds the drainage system capabilities or due to runoff. Flash flooding could also be a contributing factor to accidents on vulnerable roads, resident injuries, and exposure to unsanitary flood waters.

Vulnerabilities	
County	In the unincorporated area of the County, there are several county roads that wash out each year including: Kress Highway going under the Railroad tracks and the intersections of County Road 16 and HWY 1318
Kress	- City drainage system and their capabilities are vulnerable to becoming ineffective during flood events. - Flooding occurs on I-27 which ends up affecting the entire city due to runoff. 7th St and Paul St both see occasional flooding as well.
Happy	- City drainage system and their capabilities are vulnerable to becoming ineffective during flood events. - Flooding occurs at the intersection of Main St. and the Railroad tracks. Arnie Road is also closed often due to flooding.
Tulia	- City drainage system and their capabilities are vulnerable to becoming ineffective during flood events. - Flooding occurs at N. Dallas St and S Austin S.
KISD	Kress ISD campus – Excessive water from flash flooding can impact school grounds and contributes to excess wear on school buses leading to possible accidents/injuries to staff and students.
HISD	Happy ISD campus – Excessive water from flash flooding can impact school grounds and contributes to excess wear on school buses leading to possible accidents/injuries to staff and students.
TISD	Tulia ISD campuses (3) – Excessive water from flash flooding can impact school grounds and contributes to excess wear on school buses leading to possible accidents/injuries to staff and students.
SCHD	Swisher County Hospital District – Excessive water from flash flooding can impact hospital grounds and contributes to excess wear on ambulances and vehicles.

Probability of Future Events

Historical patterns are assumed to be a dominant factor in determining future flooding events. Based upon the historical instances of flooding events that have occurred in the area during the last 20 years, Swisher County has experienced 12 flooding events. However, due to the rural nature of the County, its highly likely the area has experienced more flooding events that have gone unreported. Based on this data, the MAT estimates that in any given year, there is at least a 60% chance that the county will experience one or more flooding events. Due to the rural nature of the planning area, changes in population patterns, land use, and development will not affect the impacts of this hazard.

Years in the Record Span (2006-2025)	# of Flooding Events that Occurred	Computation	Future Probability of a Flooding Event
20	12	$(12/20) \times 100$	60.00% each year

NFIP Insured Structures and Severe Repetitive Loss (B4)

The National Flood Insurance Program (NFIP) is managed by the Federal Emergency Management Administration (FEMA). The NFIP provides flood insurance to property owners, renters and businesses, and having this coverage helps them recover faster when floodwaters recede. Flood insurance is available to anyone living in a participating NFIP community, and homes and businesses in high-risk flood areas with mortgages from government-backed lenders are required to have flood insurance.

A Repetitive Loss (RL) property is any insurable building for which two or more claims of more than \$1,000 were paid by the NFIP within any rolling 10-year period, since 1978. A RL property may or may not be currently insured by the NFIP.

Severe Repetitive Loss (SRL) properties are defined as single or multi-family residential properties that are covered under a NFIP flood insurance policy and: that have incurred flood-related damage for which 4 or more separate claims payments have been made, with the amount of each claim (including building and contents) exceeding \$5,000 and with the cumulative amount of such claims payments exceeding \$20,000; or for which at least 2 separate claim payments (building payments only) have been made under such coverage, with the cumulative amount of such claims exceeding the market value of the building. In both instances, at least 2 of the claims must be within 10 years of each other.

The Severe Repetitive Loss grant program, under FEMA's Hazard Mitigation Assistance Grant Program, provides federal funding to assist states and communities in implementing mitigation measures to reduce or eliminate the long-term risk of flood damage to SRL residential structures insured under the NFIP. The Texas Water Development Board administers this grant program for the State of Texas on behalf of the FEMA.

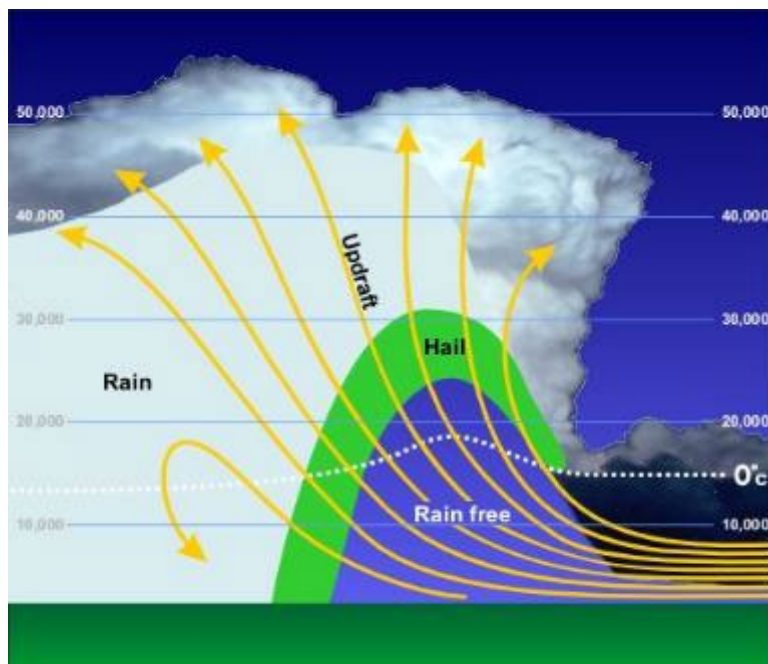
According to the NFIP, between 1978 and 2022, there has been 1 total paid loss in Tulia and no repetitive loss buildings in the planning area. Below is a table showing the breakdown of the NFIP by jurisdiction.

	CID	Policies	Total Paid Losses	Repetitive Loss Buildings
Swisher County	481010B	3	0	0
City of Happy	481011A	0	0	0
City of Kress	4810122	0	0	0
City of Tulia	480581B	12	1	0

Hail

Description

Hail is a form of precipitation consisting of solid ice that forms inside thunderstorm updrafts. Hail can damage aircraft, homes and cars, and can be deadly to livestock and people. Hailstones are formed when raindrops are carried upward by thunderstorm updrafts into extremely cold areas of the atmosphere and freeze. Hailstones then grow by colliding with liquid water drops that freeze onto hailstone's surface. Hail falls when it becomes heavy enough to overcome the strength of the thunderstorm updraft and is pulled toward the earth by gravity. If the updraft is strong enough, it will move the hailstone back into the cloud where it once again collides with water and hail and grows until the stone overcomes the updraft and falls to the ground. Wind-driven hail can damage siding on houses, break windows and blow into houses, break windows on cars, and cause severe injury and/or death to people and animals.



<https://www.weather.gov/jetstream/hail>

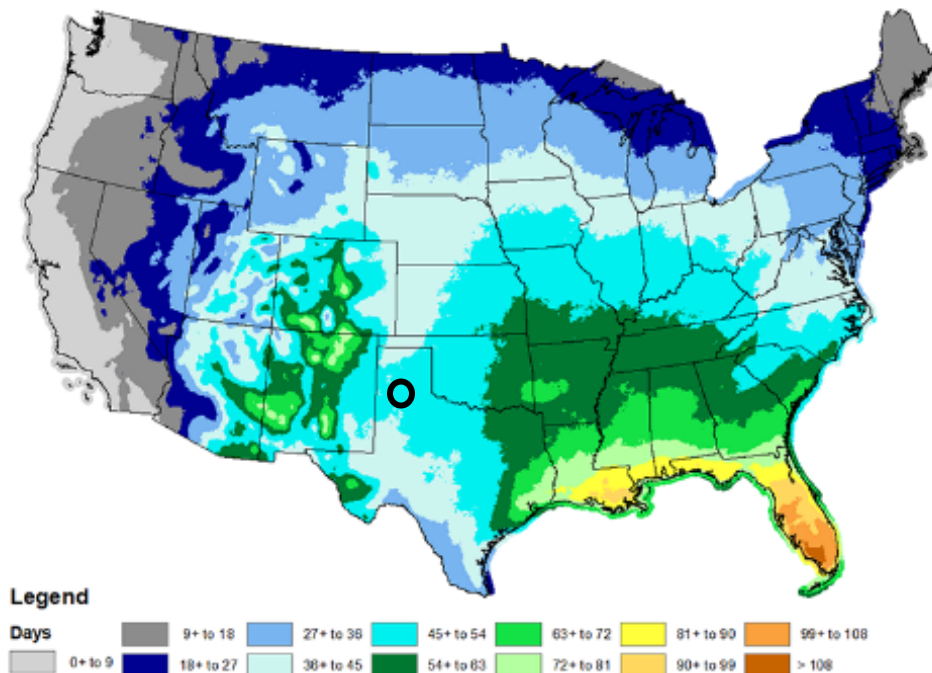
Hailstone Size	Measurement		Updraft Speed	
	<i>in</i>	<i>cm</i>	<i>mph</i>	<i>km/h</i>
BB	< 1/4	<0.64	<24	<39
Pea	1/4	0.64	24	39
Marble	1/2	1.3	35	56
Dime	7/10	1.8	38	61
Penny	3/4	1.9	40	64
Nickel	7/8	2.2	46	74
Quarter	1	2.5	49	79
Half Dollar	1 ¼	3.2	54	87
Walnut	1 ½	3.8	60	97
Golf Ball	1 ¾	4.4	64	103
Hen Egg	2	5.1	69	111
Tennis Ball	2 ½	6.4	77	124
Baseball	2 ¾	7.0	81	130
Tea Cup	3	7.6	84	135
Grapefruit	4	10.1	98	158
Softball	4 ½	11.4	103	166

Hail is often compared to general household items so that members of the community can easily report the size of the hailstones to their local weather forecasting office. Because hailstones are frozen, they typically start to melt before precise measurements can be taken. When reporting hail, estimates comparing the hail to a known object with a definite size are good, but measurements using a ruler, calipers, or a tape measure are best. To the left is a table showing the general size of the hailstone along with the diameter measurement in inches and centimeters and the estimated minimum updraft speed to keep a hailstone of that size aloft.

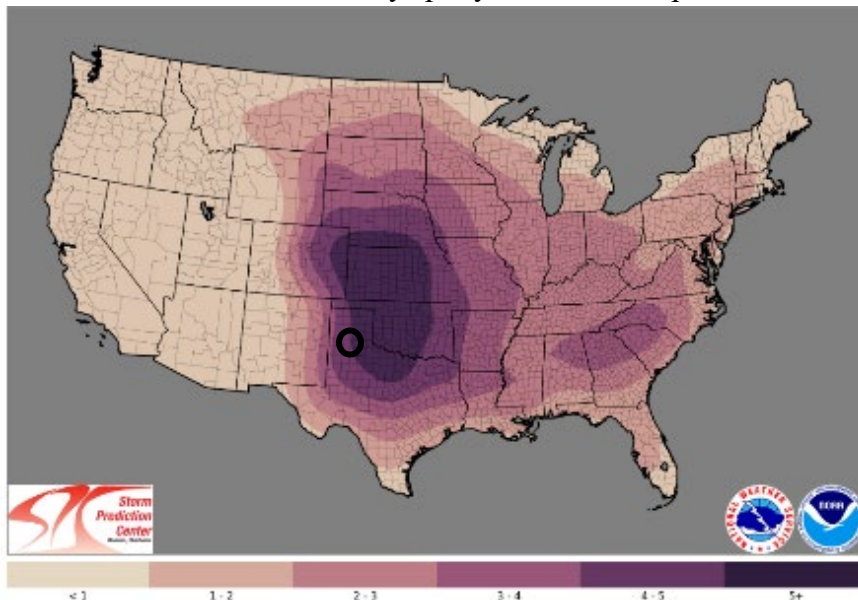
Location

Hail is formed in the updraft of strong and severe thunderstorms that have the energy to suspend the hailstones until they become heavy enough to fall to the ground. The figure below shows the average number of thunderstorm days each year throughout the U.S. The graphic defines a day of thunderstorms as two lightning flashes within a 10 nautical mile (18.5 km) radius of a given point. Swisher County can expect to see 45-54 thunderstorm days per year.

Annual Mean Thunderstorm Days (1993-2018)



The entire planning area can expect to experience hail, generally associated with severe thunderstorms, more than 3 days per year. Based on previous occurrences the entire county can



experience hailstones as large as 7.02 inches in diameter. Below is a map depicting the average number of days per year the county can expect to receive hail greater than 1.00 inch in diameter based on data from 1986-2015.

Climate Change

Predictions about the effects of climate change on hail, including event frequency, spatial distribution, and intensity (e.g., hail size, kinetic energy) are limited and uncertain. Research suggests that climate change is expected to result in conditions that increase the potential for severe thunderstorms in the U.S., broadly, of which hail is a byproduct. Additionally, some research suggests that hailstorms will be less frequent, but more extreme (larger stones) when storms do occur. Overall, the impact of climate change on hail at the local level is not yet well-understood.

Extent and Previous Occurrences

Hail is generally accompanied by other severe thunderstorm hazards, such as wind, rain, and tornadoes, making the damage that hail causes costlier. Hail is measured as the diameter of the stone in inches, and generally, the largest hailstone found is reported. The National Weather Service only records hail that measures in the severe category, meaning the diameter of the hailstone is at least 0.75 inches. Therefore, the reports of hail below should be considered severe, although no injuries were reported.



Largest hailstone in state history after storm in Swisher County on 6/2/2024, Photo Courtesy of Val Castor.

<https://www.ncei.noaa.gov/news/new-texas-hailstone-record-confirmed-noaa-and-partners>

Location	Date	Type	Magnitude	Deaths/Injuries	Damage	Description
Happy	4/28/2006	Hail	1.25 inches	0	\$0	
Kress	5/30/2006	Hail	1.75 inches	0	\$0	
Tulia	6/16/2006	Hail	1.75 inches	0	\$0	
Tulia	9/15/2006	Hail	0.88 inches	0	\$0	
Tulia	4/12/2007	Hail	1.00 inches	0	\$0	
Kress	4/20/2007	Hail	1.50 inches	0	\$0	
Tulia	4/21/2007	Hail	3.00 inches	0	\$55K	Several vehicles on the interstate were damaged, minor damage was sustained by young cotton crops.
Kress	5/28/2007	Hail	0.88 inches	0	\$10K	Minor crop damage was done by nickel size hail.
Tulia	5/31/2007	Hail	1.75 inches	0	\$0	
Happy	7/9/2007	Hail	1.00 inches	0	\$50K	Minor damage caused to vehicles by penny size hail.
Happy	8/24/2007	Hail	1.00 inches	0	\$0	
Happy	10/16/2007	Hail	1.00 inches	0	\$0	
Tulia	4/9/2008	Hail	1.00 inches	0	\$0	
Kress	6/8/2008	Hail	1.75 inches	0	\$0	

Happy	6/21/2008	Hail	0.75 inches	0	\$0	
Kress	4/16/2009	Hail	1.25 inches	0	\$500K	Vehicles became stranded on I-27 and needed rescuing.
Happy	5/12/2009	Hail	1.25 inches	0	\$0	
Kress	6/1/2009	Hail	0.75 inches	0	\$3M	Several farmers reported completely destroyed crop fields.
Tulia	6/13/2009	Hail	1.75 inches	0	\$50K	Golf ball sized hail damaged several vehicles in Tulia.
Vigo Park	6/14/2009	Hail	0.88 inches	0	\$0	
Kress	5/17/2010	Hail	0.75 inches	0	\$0	
Tulia	5/21/2010	Hail	1.00 inches	0	\$0	
Kress	6/14/2010	Hail	1.75 inches	0	\$0	
Happy	8/4/2010	Hail	1.00 inches	0	\$0	
Tulia	7/12/2011	Hail	1.00 inches	0	\$5K	Quarter sized hail caused damage in Tulia.
Happy	4/26/2012	Hail	1.75 inches	0	\$0	
Tulia Airport	6/12/2012	Hail	1.00 inches	0	\$0	
Kress	10/12/2012	Hail	1.75 inches	0	\$0	
Vigo Park	4/1/2013	Hail	1.75 inches	0	\$0	
Happy	4/22/2015	Hail	2.75 inches	0	\$4M	Baseball sized hail damaged roofs of homes and businesses, windows, and vehicles.
Kress	5/16/2015	Hail	1.25 inches	0	\$12K	Hail caused damage to multiple home windows.
Happy	7/8/2015	Hail	2.75 inches	0	\$300K	Around a dozen vehicles that were stopped on I-27 were heavily damaged by hail.
Vigo Park	11/16/2015	Hail	2.00 inches	0	\$0	
Kress	4/10/2016	Hail	2.00 inches	0	\$0	
Tulia	4/20/2016	Hail	1.00 inches	0	\$0	
Happy	6/26/2016	Hail	1.75 inches	0	\$0	
Happy	8/25/2016	Hail	1.00 inches	0	\$0	
Vigo Park	4/16/2017	Hail	2.50 inches	0	\$0	
Kress	10/5/2018	Hail	1.50 inches	0	\$0	
Tulia	4/5/2019	Hail	1.00 inches	0	\$0	
Tulia	5/5/2019	Hail	1.75 inches	0	\$0	
Eunice	5/8/2019	Hail	1.00 inches	0	\$0	
Vigo Park	6/25/2019	Hail	2.00 inches	0	\$50K	Wheat crops were completely destroyed by the hail.
Happy	5/16/2021	Hail	1.00 inches	0	\$0	

Happy	4/22/2022	Hail	2.00 inches	0	\$0	
Eunice	5/31/2022	Hail	2.00 inches	0	\$0	
Tulia	4/25/2023	Hail	2.75 inches	0	\$0	
Kress	5/22/2023	Hail	1.75 inches	0	\$0	
Vigo Park	5/28/2023	Hail	1.75 inches	0	\$0	
Happy	6/11/2023	Hail	2.75 inches	0	\$0	
Vigo Park	9/10/2023	Hail	1.00 inches	0	\$0	
Vigo Park	6/2/2024	Hail	7.02 inches	0	\$0	
Tulia	6/4/2025	Hail	1.75 inches	0	\$0	
TOTAL			53 Events	0	\$8.137M	

Impact

Hail can cause considerable damage to crops and property. Additionally, injuries and deaths can occur as a direct result to both people and livestock who are not under shelter. Hail damage to vehicles and buildings can be costly and increase insurance premiums. Damage and repairs can significantly impact daily operations, especially if buildings or equipment are unusable.

Vulnerabilities	
County	- County communication systems not covered or shielded - County facilities, including: Courthouse, Library, Jail, Headstart Building, Airport, Maintenance Complex, Fairgrounds, DHS Office, PCS Office, Annex Building— damage from a power outage, frozen pipes, and/or roof damage - County-owned vehicles and equipment not covered or shielded - Roads and highways maintained by the County
Kress	- City communication systems not covered or shielded - City facilities, including: City Hall, Fire Department, Utility Infrastructure, Technology - damage from a power outage, frozen pipes, and/or roof damage - City-owned vehicles and equipment not covered or shielded - Roads maintained by the City - Economic impact from businesses damaged in town, no tax revenue
Happy	- City communication systems not covered or shielded - City facilities, including: City Hall, Fire Station, EMS Station, Utility Infrastructure, Technology - City-owned vehicles and equipment not covered or shielded - Roads maintained by the City - Economic impact from businesses damaged in town, no tax revenue
Tulia	- City communication systems not covered or shielded - City facilities, including: City Hall, Fire Station, Police Department, Alternate Education Center, Community Center, Utility Infrastructure, Technology - City-owned vehicles and equipment not covered or shielded - Roads maintained by the City - Economic impact from businesses damaged in town, no tax revenue
KISD	- Kress ISD, including: 1 Campus, Maintenance Complex, Residential Home (2), Bus Barn, Buses and Vehicles, and Technology - Lost educational time from school closures, accidents, and staff/student injuries
HISD	Happy ISD, including: 1 Campus, Athletic Facilities, and Technology— damage to roofs, HVAC, windows, etc.

	Lost educational time from school closures, accidents, and staff/student injuries
TISD	- Tulia ISD, including: 3 Campuses, Ag Barn, Maintenance and Bus Barn, School Vehicles– damage to roofs, HVAC, windows, etc. - Lost educational time from school closures, accidents, and staff/student injuries
SCHD	Swisher County Hospital – Damage to roofs, buildings, HVAC, windows, and vehicles.

Probability of Future Events

Historical patterns are assumed to be a dominant factor in determining future hail events. Based upon the historical instances of hail events which have occurred in the area during the last 20 years, the MAT estimates the probability of a hail event somewhere in the County in any given year to be 265%, meaning that on average the County will see 2.65 hail events per year. Due to the rural nature of the planning area, changes in population patterns, land use, and development will not affect the impacts of this hazard.

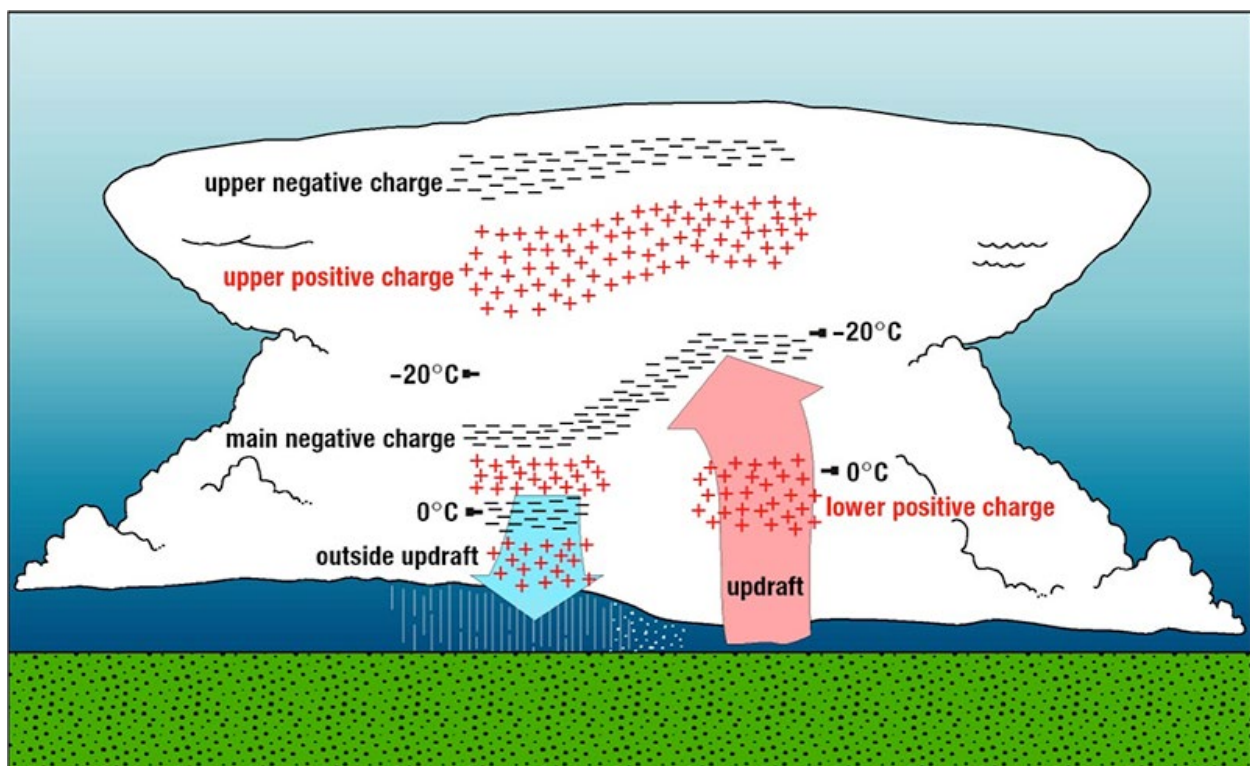
Years in the Record Span (2006-2025)	# of Hail Events that Occurred	Computation	Future Probability of a Hail Event
20 Years	53 Events	$(53/20) \times 100$	265% each year

Lightning

Description

Lightning is a giant spark of electricity in the atmosphere between clouds, the air, or the ground. In the early stages of development, air acts as an insulator between the positive and negative charges in the cloud and between the cloud and the ground. When the opposite charges build up enough, the insulating capacity of the air breaks down, and there is a rapid discharge of electricity, which we know as lightning. The flash of lightning temporarily equalizes the charged regions in the atmosphere until the opposite charges build up again.

Lightning can occur between opposite charges within the thunderstorm cloud (intra-cloud lightning) or between opposite charges in the cloud and on the ground (cloud-to-ground lightning). Tall objects, such as trees and buildings, are commonly struck by lightning, but lightning can strike the ground in a field even if the tree line is close by. It all depends on where the charges accumulate. Dry lightning occurs when the thunderstorm associated with the strike produces little or no precipitation at the surface. In dry atmospheres, the precipitation produced by the thunderstorm evaporates before it can reach the ground. Because there is very little measurable rainfall, fires started by lightning are not subsequently put out by the precipitation, allowing the fire to spread. A conceptual model (below) shows the electrical charge distribution inside deep convection (thunderstorms) developed by the National Severe Storms Laboratory and university scientists. In the main updraft, (in and above the red arrow), there are four main charge regions. In the convective region but outside the updraft (in and above the blue arrow), there are more than four charge regions. These different charge regions cause lightning to occur.



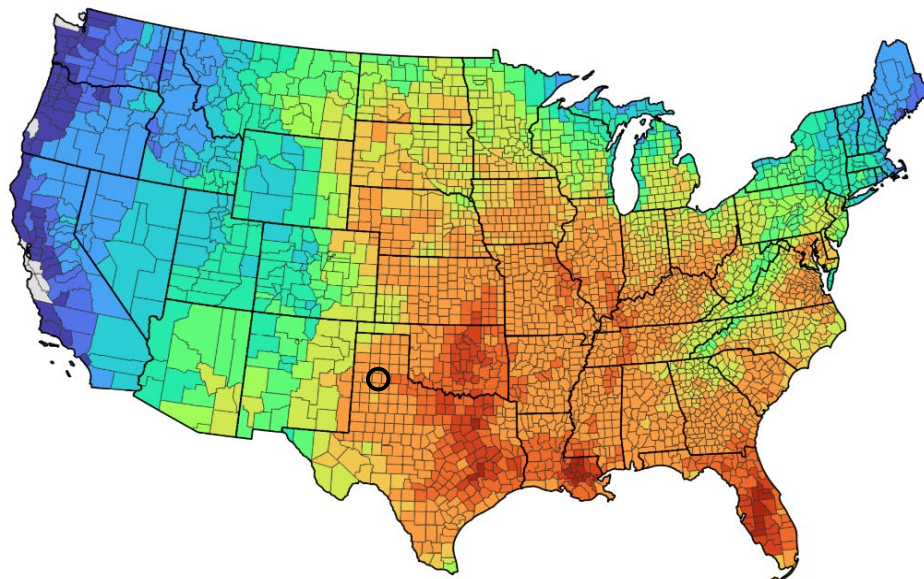
Location

The entire planning area can expect to experience 32-64 lightning events per year based on data from 2016-2022 available through the Vaisala Lightning Network. The map below can be found in the Vaisala 2023 Annual Lightning Report.

Total lightning density in the U.S.

2023 ☐ GRIDDED ☐ 2016-2022
2023 ☐ COUNTY ☒ 2016-2022
☐ DIFFERENCES 2023 VS 2016-2022 

Lightning events per km² per year
0.1 0.5 1 2 4 8 12 16 24 32 64 96 128 256



Climate Change

Predictions about the effects of climate change on lightning, including event frequency and spatial distribution, are limited and uncertain. Research suggests that climate change is expected to result in conditions that increase the potential for severe thunderstorms in the U.S., broadly. Lightning is a byproduct of severe thunderstorms, so an increased potential of those storms developing could transfer to an increased potential for lightning. Overall, the impact of climate change on lightning at the local level is not yet well-understood.

Extent and Previous Occurrences

As demonstrated in the Location section above, Swisher County can see 32-64 lightning events each year. Each strike of lightning is about 300 million volts and 30,000 amps, and it can heat up the air it passes through to 50,000 degrees Fahrenheit.⁸ Lightning strikes can ignite wildfires, damage water and wastewater utility infrastructure, and disable electronic equipment. The County has had 2 wells hit by lightning. The City of Happy and Tulia have had power lines and communication towers taken out by lightning. In the Wildfire section further in this document, lightning is the cause of many of the wildfires.

Impact

The impact of lightning on critical services and buildings can vary greatly depending on where the lightning strike hits. If a building takes a direct hit, all electronic equipment plugged in at the time of the strike can be damaged. A direct strike on a water utility can severely impact the ability of the system to provide water and wastewater service to the community.

⁸ <https://www.weather.gov/safety/lightning-science>

Vulnerabilities	
County	• Loss of electricity and power surges for county facilities, including: Courthouse, Library, Jail, Headstart Building, Airport, Maintenance Complex, Fairgrounds, DHS Office, PCS Office, Annex Building– damage from a power outage, frozen pipes, and/or roof damage • County radio towers and communication systems, including the potential disruption of 911 Emergency Communication systems • People and animals that are not sheltered during a lightning event
Kress	• Power surges and loss of electricity for city facilities, including: City Hall, Fire Department, Utility Infrastructure, Technology • Direct strike on utility infrastructure causing a malfunction or work stoppage • City radio towers and communication systems • People and animals that are not sheltered during a lightning event • Economic impact from businesses damaged in town, no tax revenue
Happy	• Power surges and loss of electricity for city facilities, including: City Hall, Fire Station, EMS Station, Utility Infrastructure, Technology • Direct strike on utility infrastructure causing a malfunction or work stoppage • City radio towers and communication systems • People and animals that are not sheltered during a lightning event • Economic impact from businesses damaged in town, no tax revenue
Tulia	• Power surges and loss of electricity for city facilities, including: City Hall, Fire Station, Police Department, Alternate Education Center, Community Center, Utility Infrastructure, Technology • Direct strike on utility infrastructure causing a malfunction or work stoppage • City radio towers and communication systems • People and animals that are not sheltered during a lightning event • Economic impact from businesses damaged in town, no tax revenue
KISD	• Power surges and loss of electricity for Kress ISD campus, damage to electrical equipment and computer systems • Lost educational time from school closures, accidents, and staff or student injuries
HISD	• Power surges and loss of electricity for Happy ISD campus, damage to electrical equipment and computer systems • Lost educational time from school closures, accidents, and staff or student injuries
TISD	• Power surges and loss of electricity for Tulia ISD campuses, damage to electrical equipment and computer systems • Lost educational time from school closures, accidents, and staff or student injuries
SCHD	• Power surges and loss of electricity in the hospital facility, damaging electrical equipment and computer systems.

Probability of Future Events

There is a 100% probability of future lightning events within the planning area. Swisher County is vulnerable to thunderstorms and the cloud-to-ground lightning strikes associated with them.

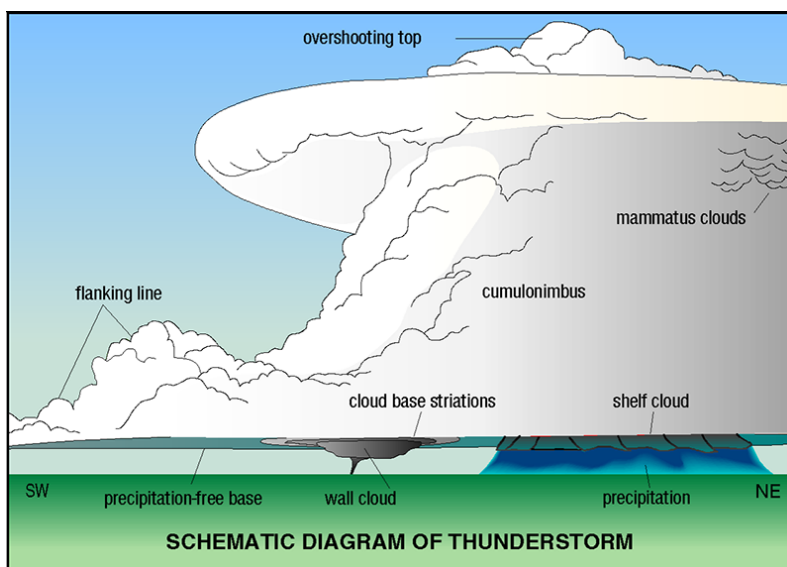
Due to the rural nature of the planning area, changes in population patterns, land use, and development will not affect the impacts of this hazard.

Tornado

Description

A tornado is a narrow, violently rotating column of air that extends from a severe thunderstorm to the ground.

Because wind is invisible, it is hard to see a tornado unless it forms a condensation funnel made up of water droplets, dust, and debris. The most destructive tornadoes occur from supercells, which are rotating storms with a well-defined radar circulation called a mesocyclone. To the right is a diagram of a classic discrete, supercell thunderstorm structure.



To determine the strength of a tornado, experts examine the damage it caused. The Enhanced Fujita Scale or EF Scale is used to assign a tornado a “rating” based on estimated wind speeds and related damage. When tornado-related damage is surveyed, it is compared to a list of Damage Indicators and Degrees of Damage which help estimate better the range of wind speeds the tornado likely produced. From that, a rating (from EF-0 to EF-5) is assigned. The EF Scale was revised from the original Fujita to reflect better examinations of tornado damage surveys so as to align wind speeds more closely with associated storm damage.

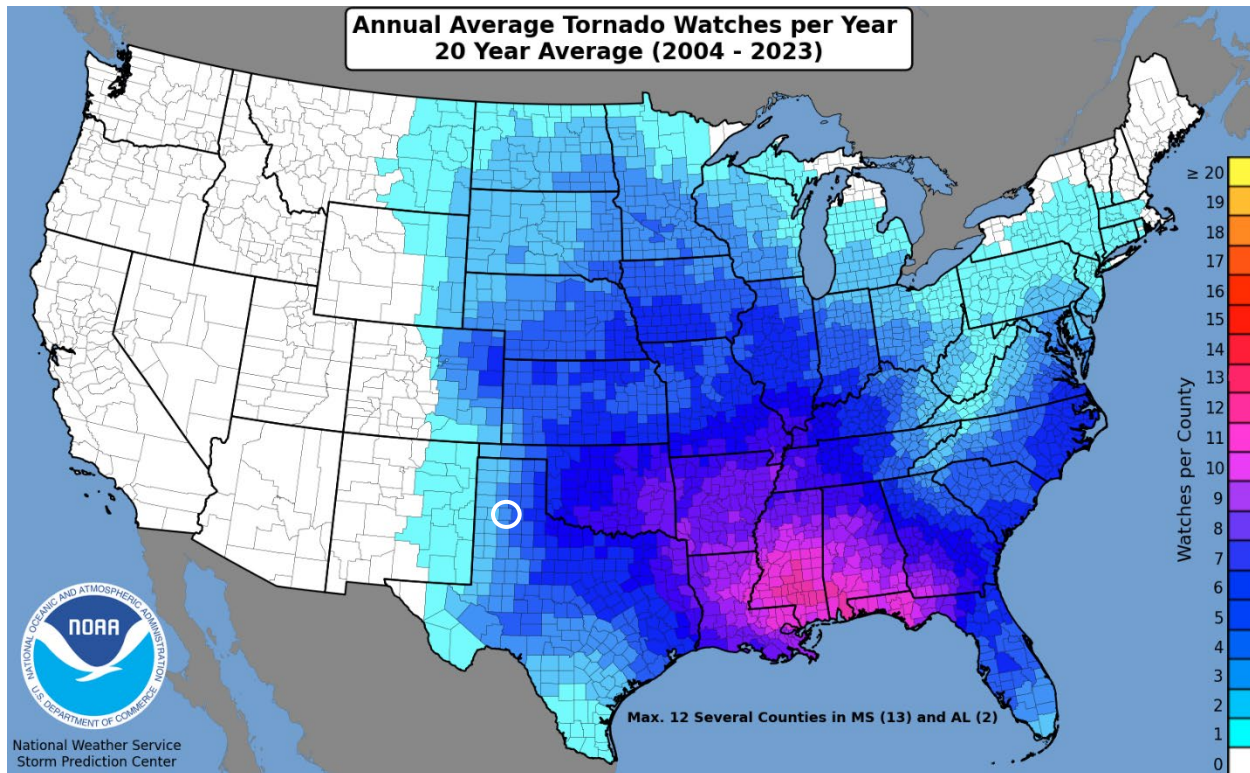
<https://www.nssl.noaa.gov/education/svrwx101/tornadoes/>

EF Rating	Wind Speeds	Expected Damage ⁹
EF-0	65-85 mph	Minor damage: shingles blown off or parts of a roof peeled off, damage to gutters/siding, branches broken off trees, shallow rooted trees toppled.
EF-1	86-110 mph	Moderate damage: more significant roof damage, windows broken, exterior doors damaged or lost, mobile homes overturned or badly damaged.
EF-2	111-135 mph	Considerable damage: roofs torn off well-constructed homes, homes shifted off their foundation, mobile homes completely destroyed, large trees snapped or uprooted, cars can be tossed.
EF-3	136-165 mph	Severe damage: entire stories of well-constructed homes destroyed, significant damage done to large buildings, homes with weak foundations can be blown away, trees begin to lose their bark.
EF-4	166-200 mph	Extreme damage: well-constructed homes are leveled, cars are thrown significant distances, top story exterior walls of masonry buildings would likely collapse.
EF-5	> 200 mph	Incredible damage: well-constructed homes are swept away, steel-reinforced concrete structures are critically damaged, high-rise buildings sustain severe structural damage, trees are usually completely debarked, stripped of branches and snapped.

⁹ https://www.weather.gov/hun/efscale_explanation

Location

The entire planning area can expect to experience the threat of a tornado each year. Tornado watches are issued by the NOAA Storm Prediction Center when conditions are favorable for the development of tornadoes in and close to the watch area. Swisher County is under 3 tornado watches per year on average, meaning conditions are favorable 3 days each year on average. In recent history, Swisher County has only seen weaker tornadoes (e.g. EF-1). However, the County can experience up to an EF-5 tornado if the conditions are right.



<https://www.spc.noaa.gov/wcm/>

Climate Change

Predictions about the effects of climate change on tornadoes, including event frequency, spatial distribution, and intensity (e.g., magnitude) are limited and uncertain. Research suggests that climate change is expected to result in conditions that increase the potential for severe thunderstorms in the U.S., broadly. Tornadoes form from severe thunderstorms, so an increased potential of those storms developing could transfer to an increased potential for tornadoes. Some research suggests that days with tornado outbreaks are becoming more frequent, while days with just a few tornadoes are becoming less frequent. Additionally, there have been studies done that show “tornado alley” shifting eastward. Overall, because of the relatively short records (only back to 1950), the impact of climate change on tornadoes at the local level is not yet well-understood.

Extent and Previous Occurrences

Tornadoes can strike anywhere in the county at any time, day or night. Generally, tornadoes impact the area during the afternoon and evening hours, but events during the morning and nighttime hours cannot be ruled out. Tornadoes are rated using the EF-scale described previously. This scale relies on estimated wind speeds and damage to provide an accurate rating

of the tornado. Because of the rural nature of the County, most tornadoes occur over open land with few structures in their paths, which makes assigning a rating to them harder. Tornadoes are products of severe thunderstorms which typically have rain, lightning, high winds, and hail as well. These other hazards combined with a tornado can make the situation much more dangerous.

Location	Date	Magnitude	Deaths/ Injuries	Damage	Narrative
Happy	8/20/2006	F-0	0	\$0	Over open land, approx. 0.3 miles long, 25 yards wide
Tulia	3/25/2007	EF-0	0	\$0	Over open land, approx. 0.5 miles long, 25 yards wide
Kress	3/28/2007	EF-0	0	\$0	Over open land, approx. 1.0 miles long, 75 yards wide
Kress	4/21/2007	EF-2	0	\$30K	One center pivot irrigation system was heavily damaged, 1.0 miles long, 1230 yards wide
Tulia	4/21/2007	EF-2	3	\$2M	NWS estimates that 30 homes sustained damage along with 20 businesses. 500 people were displaced. 41 buildings were damaged. The President declared Swisher County a federal disaster area.
Tulia	4/21/2007	EF-1	0	\$0	Over open land, approx. 4.0 miles long, 300 yards wide
Happy	4/21/2007	EF-0	0	\$0	Over open land, approx. 1.0 miles long, 500 yards wide
Tulia	9/7/2007	EF-0	0	\$0	Over open land, approx. 1.25 miles long, 75 yards wide
Kress	4/16/2009	EF-0	0	\$0	Over open land, approx. 1.0 miles, 75 yards wide
Kress	4/14/2017	EF-U	0	\$0	Over open land, approx. 0.91 miles long, 50 yards wide
Eunice	5/7/2019	EF-U	0	\$0	Over open land, approx. 1.51 miles long, 600 yards wide
Vigo Park	5/7/2019	EF-U	0	\$0	Over open land, approx. 5.35 miles long, 150 yards wide
Happy	3/13/2021	EF-1	0	\$0	Over open land, approx. 4.05 miles long, 377 yards wide
Happy	3/13/2021	EF-0	0	\$0	Over open land, approx. 1.57 miles long, 50 yards wide
Vigo Park	5/28/2023	EF-U	0	\$0	Over open land, approx. 0.37 miles long, 30 yards wide
TOTAL		15 Events	3	\$2.030M	

Impact

Tornadoes can damage and destroy homes and businesses, but more devastating can be the impact to basic services such as law enforcement, fire protection, and emergency medical services. After a tornado hits a population center, there is a great need for these basic services as residents assess injuries and damage. Some other major impacts are: loss of communication systems, loss of power, loss of infrastructure for utility services, and damage to medical facilities.

Vulnerabilities	
County	- County communication systems - County facilities, including: Courthouse, Library, Jail, Headstart Building, Airport, Maintenance Complex, Fairgrounds, DHS Office, PCS Office, Annex Building—damage from a power outage, frozen pipes, and/or roof damage - Death and/or injury of county employees at work during the time of the event - County-owned vehicles and equipment, especially emergency response vehicles - Roads and highways maintained by the County
Kress	- City communication systems - City facilities, including: City Hall, Fire Department, Utility Infrastructure, Technology - Death and/or injury of city employees at work during the time of the event - City-owned vehicles and equipment, especially emergency response vehicles - Roads maintained by the City - Economic impact from businesses damaged in town, no tax revenue
Happy	- City communication systems - City facilities, including: City Hall, Fire Station, EMS Station, Utility Infrastructure, Technology - Death and/or injury of city employees at work during the time of the event - City-owned vehicles and equipment, especially emergency response vehicles - Roads maintained by the City - Economic impact from businesses damaged in town, no tax revenue
Tulia	- City communication systems - City facilities, including: City Hall, Fire Station, Police Department, Alternate Education Center, Community Center, Utility Infrastructure, Technology - Death and/or injury of city employees at work during the time of the event - City-owned vehicles and equipment, especially emergency response vehicles - Roads maintained by the City - Economic impact from businesses damaged in town, no tax revenue
KISD	- Kress ISD, including: 1 Campus, Maintenance Complex, Residential Home (2), Bus Barn, Buses and Vehicles, and Technology - Death and/or injury of students and staff at the school at the time of the event - Lost educational time from school closures, accidents, and staff or student injuries
HISD	- Happy ISD, including: 1 Campus, Athletic Facilities, and Technology – damage to roofs, HVAC, windows, etc. - Death and/or injury of students and staff at the school at the time of the event - Lost educational time from school closures, accidents, and staff or student injuries
TISD	- Tulia ISD, including: 3 Campuses, Ag Barn, Maintenance and Bus Barn, School Vehicles – damage to roofs, HVAC, windows, etc. - Death and/or injury of students and staff at the school at the time of the event - Lost educational time from school closures, accidents, and staff or student injuries
SCHD	- Swisher County Hospital District’s medical facilities can be damaged including roofs, HVAC systems, windows, and vehicles. - Death and/or injury of staff at the time of the event.

Probability of Future Events

Historical patterns are assumed to be a dominant factor in determining future hail events. Based upon the historical instances of tornadic events which have occurred in the area during the last 20 years, the MAT estimates the probability of a tornadic event somewhere in the County in any given year to be 75%. Due to the rural nature of the planning area, changes in population patterns, land use, and development will not affect the impacts of this hazard.

Years in the Record Span (2006-2025)	# of Tornadic Events that Occurred	Computation	Future Probability of a Tornadic Event
20 Years	15 Events	$(15/20) \times 100$	75% each year

Wildfire

Description

A wildfire is an unplanned fire that burns in a natural area such as a forest, grassland, or prairie. Wildfires are often caused by human activity or a natural phenomenon such as lightning, and they can happen at any time or anywhere. The risk of a wildfire increases in extremely dry conditions, such as drought, and during high winds. Wildfires can disrupt transportation, communications, power and gas services, and water supply. They also lead to a deterioration of the air quality, and loss of property, crops, resources, animals, and people.

Fire danger is a measure of the relative seriousness of burning conditions and threat of fire. The National Fire Danger Rating System (NFDRS) is applied to reflect the general conditions of either current or future fire situations. Conditions of wildland fuels are observed and used to calculate and predict fire potential. Fire danger ratings are generated from data collected daily at remote automated weather stations located across the state. In the NFDRS, fire danger is expressed as different levels:

- Low – Fuels do not ignite easily from small embers, but a more intense heat source, such as lightning, may start fires in duff or dry rotten wood. Fires in open, dry grasslands may burn easily a few hours after a rain, but most wood fires will spread slowly, creeping or smoldering. Control of fires is generally easy.
- Moderate – Fires can start from most accidental causes, but the number of fire starts is usually pretty low. If a fire does start in an open, dry grassland, it will burn and spread quickly on windy days. Most wood fires will spread slowly to moderately. Average fire intensity will be moderate except in heavy concentrations of fuel, which may burn hot. Fires are still not likely to become serious and are often easy to control.
- High – Fires can start easily from most causes and small fuels (such as grasses and needles) will ignite readily. Unattended campfires and brush fires are likely to escape. Fires will spread easily, with some areas of high-intensity burning on slopes or concentrated fuels. Fires can become serious and difficult to control unless they are put out while they are still small.
- Very High – Fires will start easily from most causes. The fires will spread rapidly and have a quick increase in intensity, right after ignition. Small fires can quickly become large fires and exhibit extreme fire intensity, such as long-distance spotting and fire whirls. These fires can be difficult to control and will often become much larger and longer-lasting fires.
- Extreme – Fires of all types start quickly and burn intensely. All fires are potentially serious and can spread very quickly with intense burning. Small fires become big fires much faster than at the “very high” level. Spot fires are probable, with long-distance spotting likely. These fires are very difficult to fight and may become very dangerous and often last for several days.

The Keetch-Byram Index (KBDI) is another index used to determine fire potential. The drought index is based on a daily water balance, where a drought factor is balanced with precipitation and soil moisture (assumed to have a maximum storage capacity of 8 inches) and is expressed in hundredths of an inch of soil moisture depletion. The drought index ranges from 0 to 800, where a drought index of 0 represents no moisture depletion, and an index of 800 represents absolutely dry conditions. Below is a table describing the implications of a wildfire at varying degrees of soil moisture.

Index	Fire Danger	Description
0-200	Low	Soil and fuel moisture are high. Most fuels will not readily ignite or burn. However, with sufficient sunlight and wind, cured grasses and some light surface fuels will burn in spots and patches.
200-400	Moderate	Fires more readily burn and will carry across an area with no “gaps”. Heavier fuels will still not readily ignite and burn. Also, expect smoldering and the resulting smoke to carry into and possibly through the night.
400-600	High	Fire intensity begins to significantly increase. Fires will readily burn in all directions exposing mineral soils in some locations. Larger fuels may burn or smolder for several days creating possible smoke and control problems.
600-800	Extreme	Surface litter and most of the organic layer is consumed. 1000-hour fuels contribute to intensity. Stumps will burn to the end of the roots underground. Any dead snag will ignite. Spotting from snags is a major problem if close to line. Expect dead limbs on trees to ignite from sparks. Expect extreme intensity on all fires which makes control efforts difficult. With winds above 10 miles per hour, spotting is the rule. Expect increased need for resources for fire suppression. The direct initial attack is almost impossible. Only rapid response time to wildfire with complete mop-up and patrol will prevent a major fire situation from developing.

<https://www.dentoncounty.gov/271/Keetch-Byram-Drought-Index>

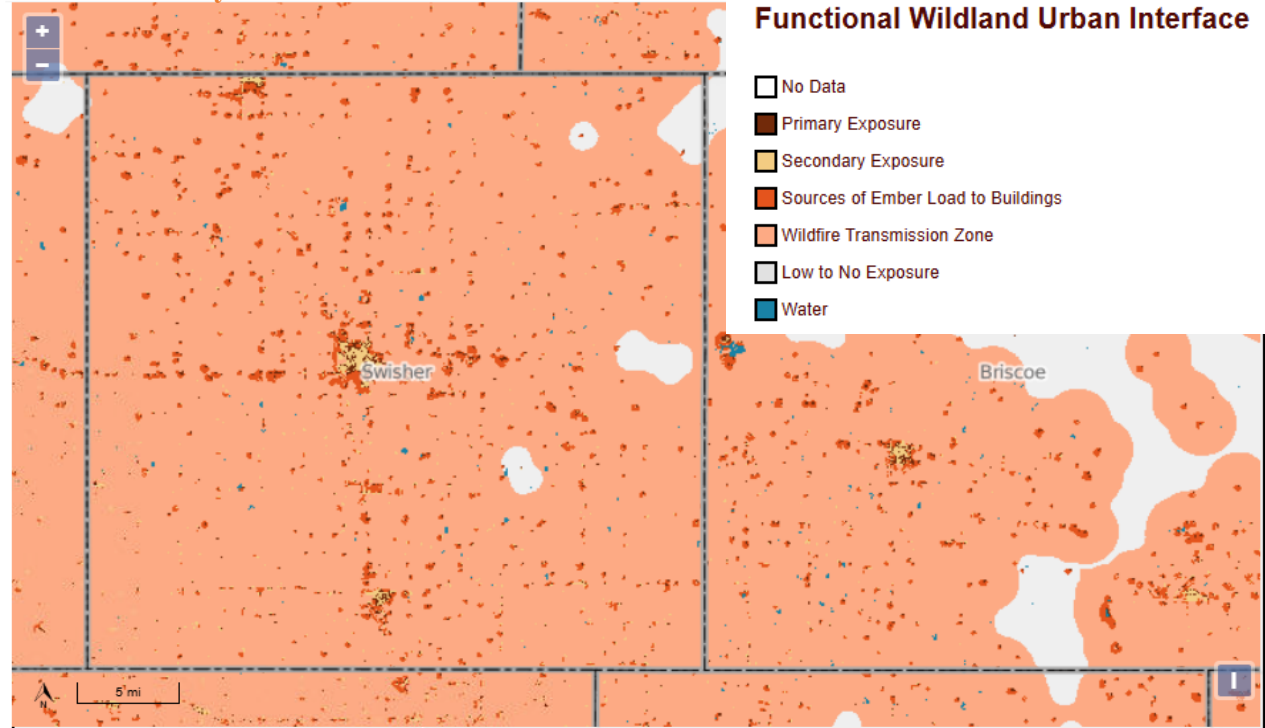
Location

The entire planning area is vulnerable to wildfires. Below are maps depicting the Functional Wildland Urban Interface (WUI) and Characteristic Fire Intensity Scale (CFIS) for each jurisdiction. The WUI is the zone of transition between unoccupied land and human development. It is the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. CFIS specifically identifies areas where significant fuels hazards and associated dangerous fire behavior potential exist based on a weighted average of four percentile weather categories. It consists of 5 classes where the order of magnitude for each class is ten-fold:

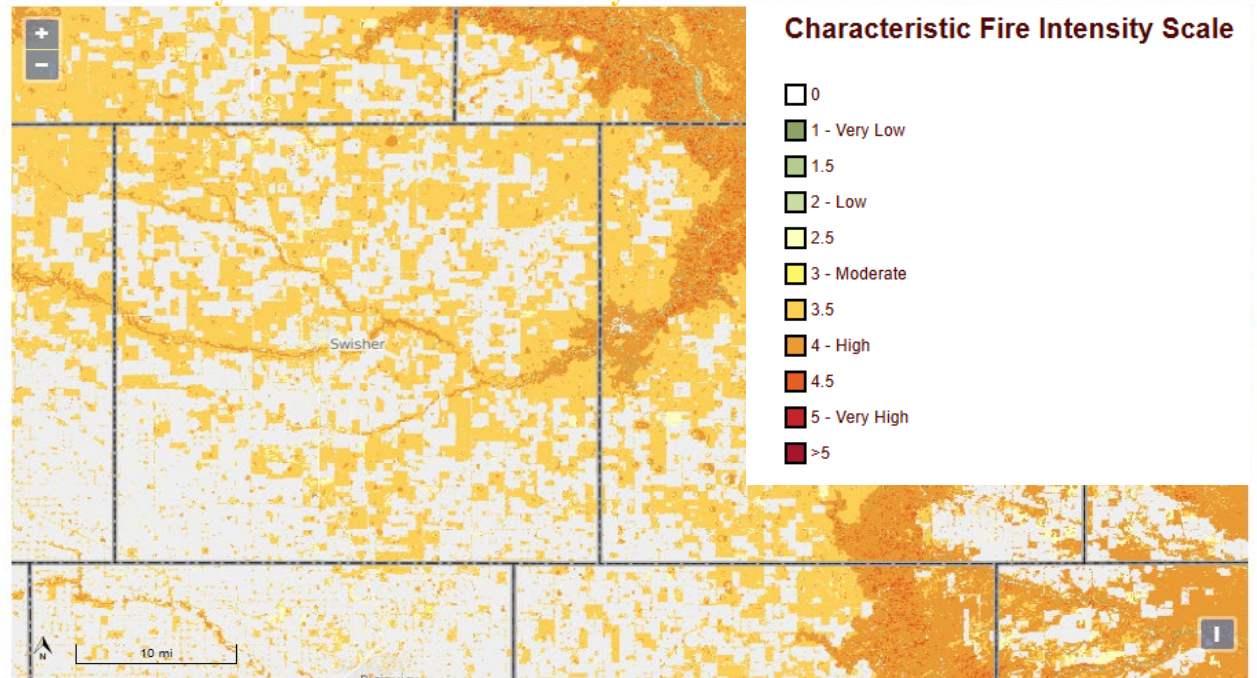
- Class 1, Very Low – Very small, discontinuous flames, usually less than 1 foot in length; very low rate of spread; no spotting. Fires are typically easy to suppress by firefighters with basic training and non-specialized equipment.
- Class 2, Low – Small flames, usually less than 2 feet long; small amount of very short-range spotting possible. Fires are easy to suppress by trained firefighters with protective equipment and specialized tools.
- Class 3, Moderate – Flames up to 8 feet in length; short-range spotting is possible. Increasing potential for harm or damage to life and property.
- Class 4, High – Large flames, up to 30 feet in length; short-range spotting common; medium range spotting possible. Significant potential for harm or damage to life and property.

- Class 5, Very High – Very large flames, up to 150 feet in length; profuse short-range spotting, frequent long-range spotting; strong fire-induced winds. Great potential for harm or damage to life and property.

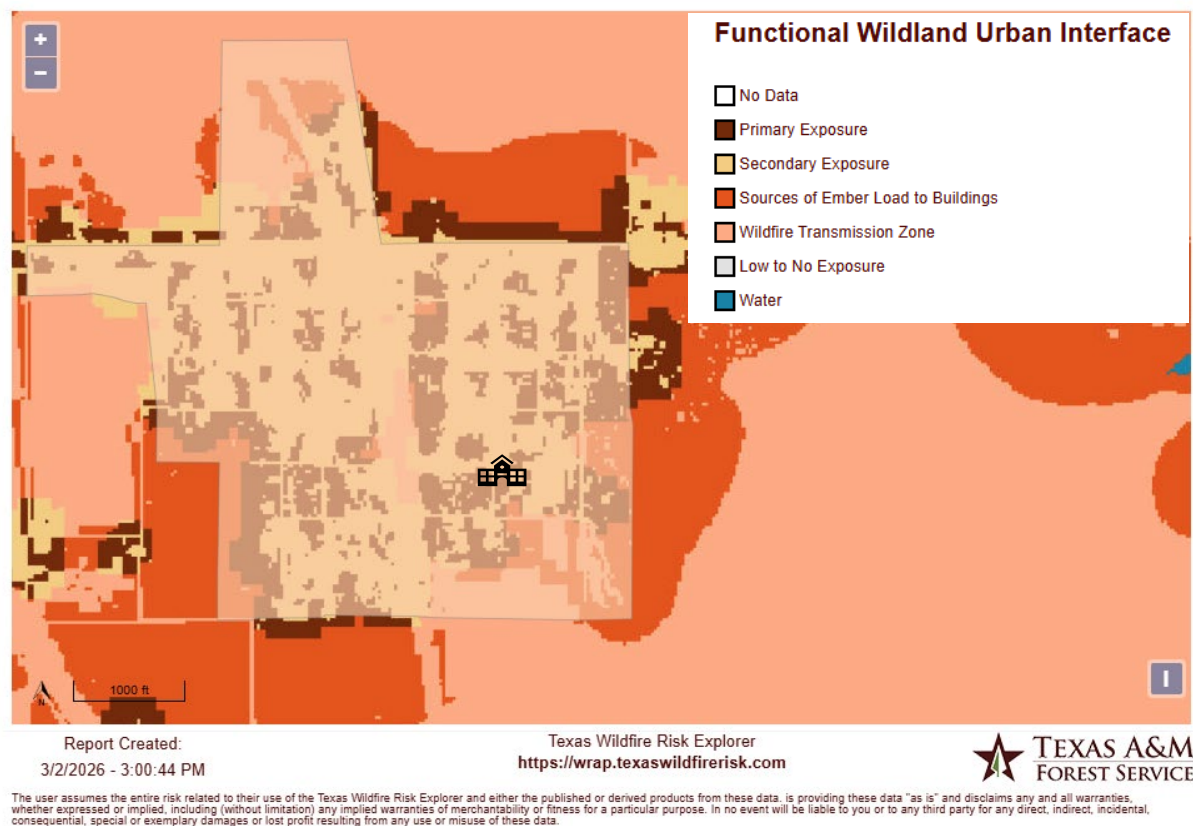
Swisher County Functional Wildland Urban Interface



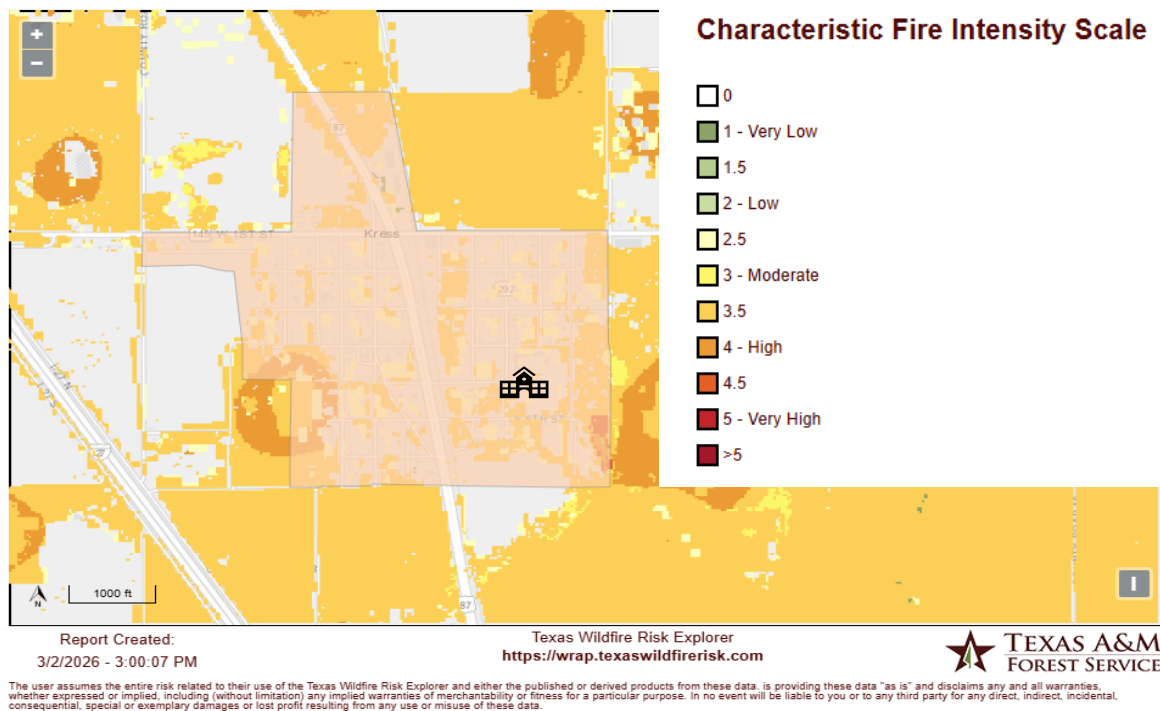
Swisher County Characteristic Fire Intensity Scale



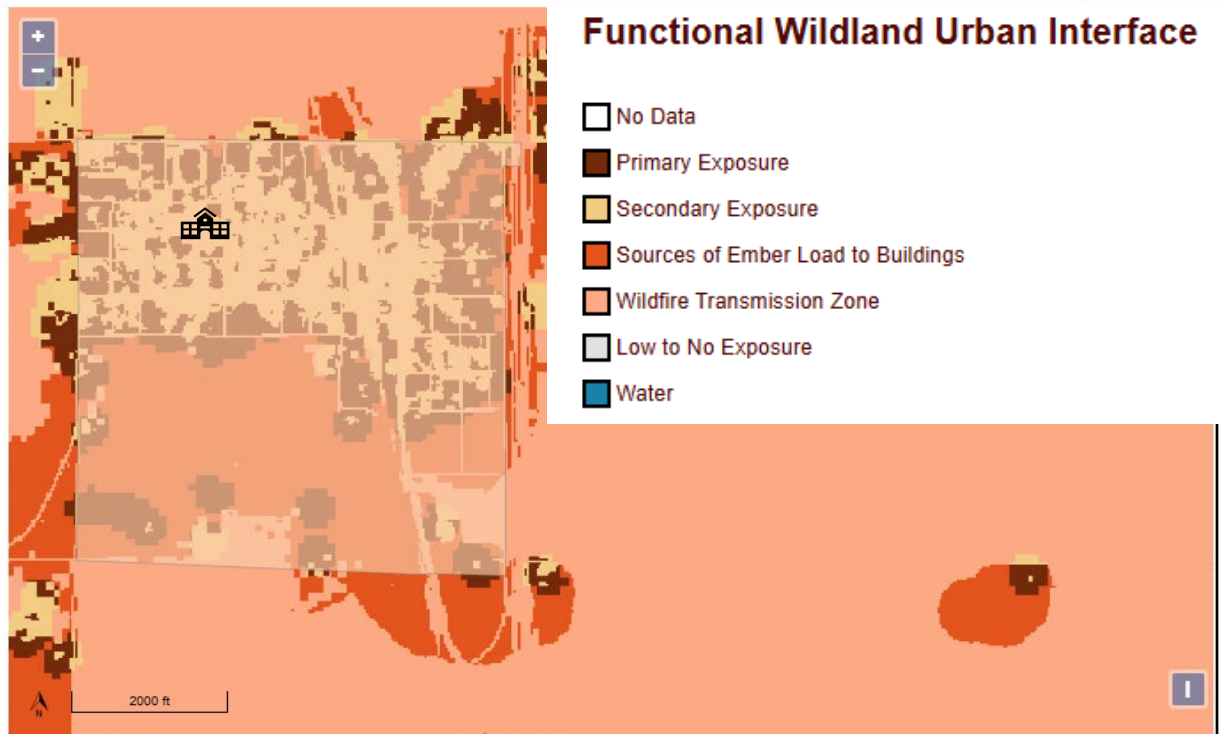
City of Kress Functional Wildland Urban Interface



City of Kress Characteristic Fire Intensity Scale



City of Happy Functional Wildland Urban Interface



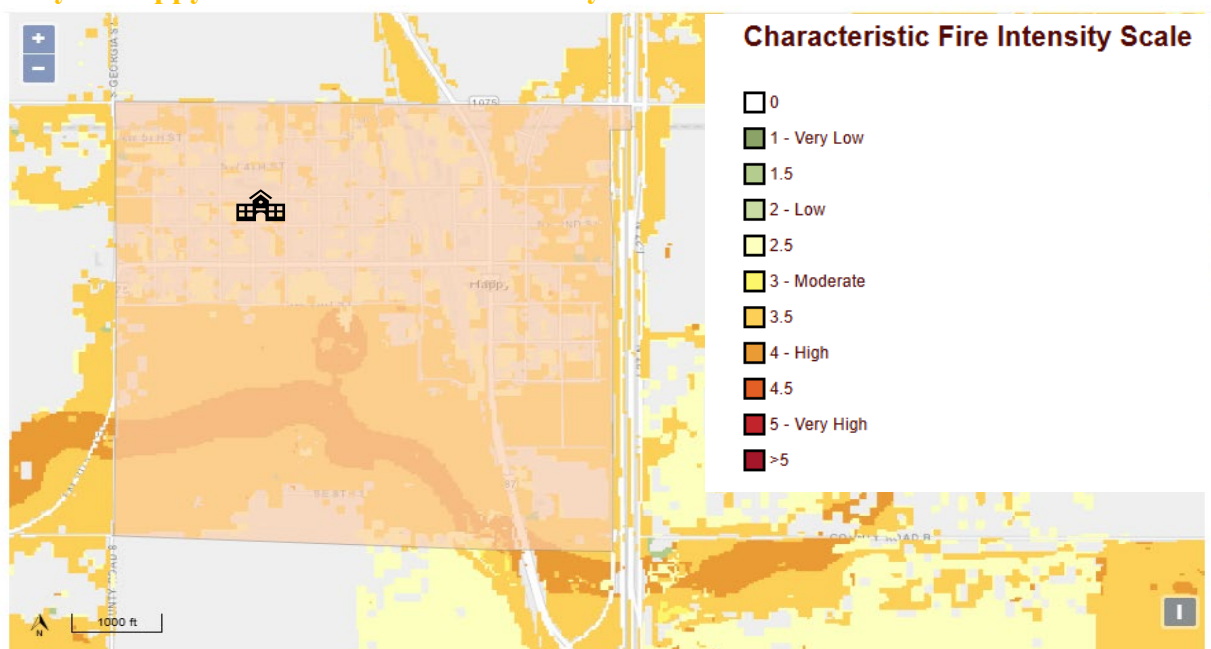
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Texas Wildfire Risk Explorer
<https://wrap.texaswildfirerisk.com>



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City of Happy Characteristic Fire Intensity Scale



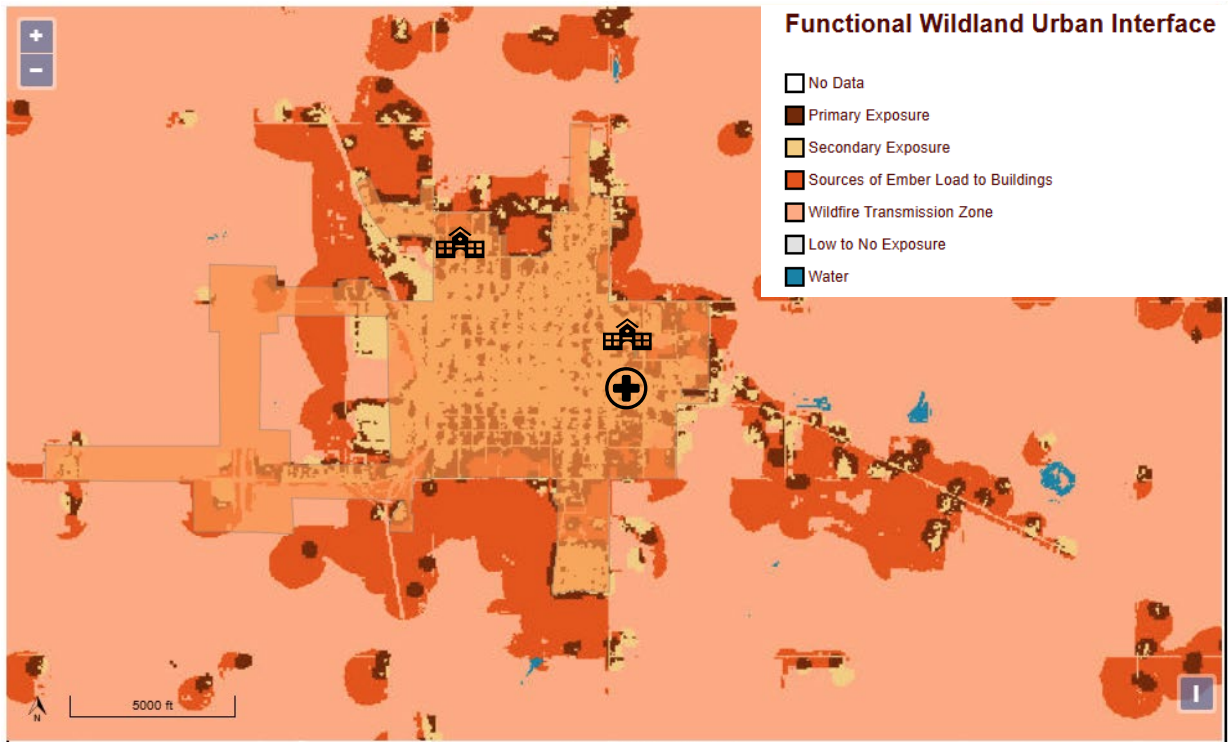
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Texas Wildfire Risk Explorer
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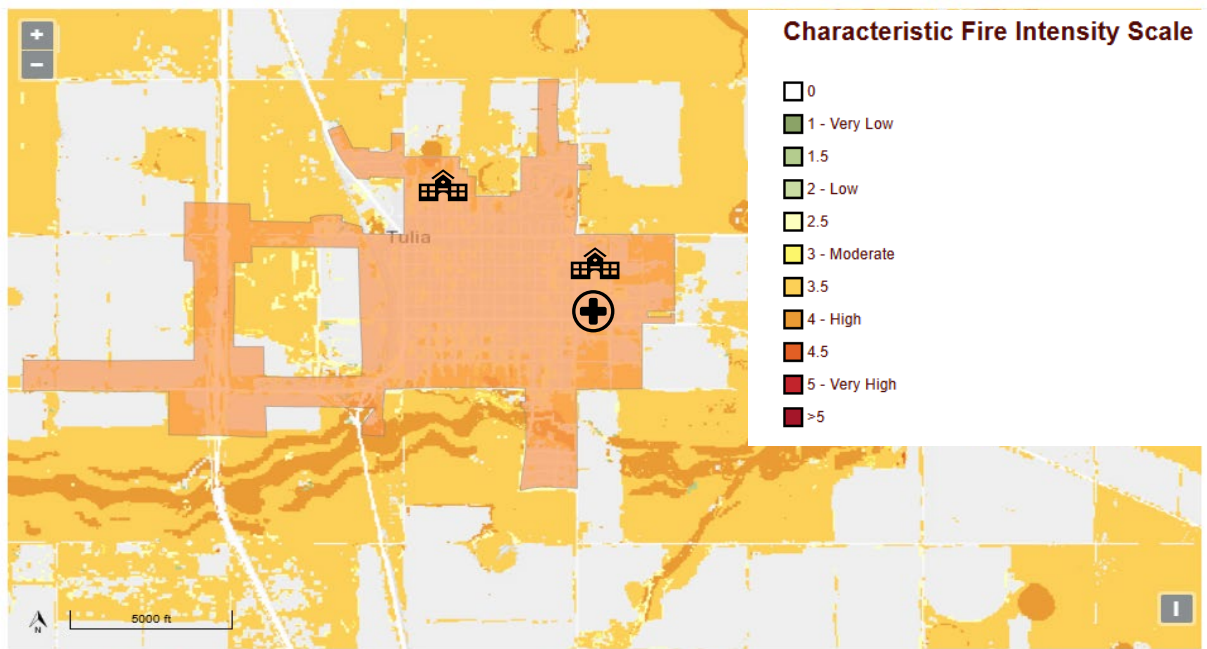


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City of Tulia Functional Wildland Urban Interface



City of Tulia Characteristic Fire Intensity Scale



Climate Change

Climate change, including increased heat, extended drought, and a dry atmosphere, has been a key driver in increasing the risk and extent of wildfires in the western United States during the last two decades. Wildfires require the alignment of a number of factors, including temperature, humidity, and the lack of moisture in fuels, such as trees, shrubs, grasses, and forest debris. All these factors have strong direct or indirect ties to climate variability and climate change. A 2016 study found enhanced the drying of organic matter and doubled the number of large fires between 1984 and 2015 in the western United States. A 2021 study supported by NOAA concluded that climate change has been the main driver of the increase in fire weather in the western United States.

Extent and Previous Occurrences

Wildfires in the county have ranged from under an acre to over 3,000 acres, with a total of 4,640 acres burned since 2006. Due to the high winds and low vegetation, these fires can swiftly grow to sizes that make them very difficult to contain, even with state resources and air support. These fires have not caused any reported deaths or injuries, but have caused some near misses, with an estimated \$535,000 in damages. There are large gaps in the wildfire data, so true cost of response, injuries, and damage caused by wildfires is likely much higher.

Impact

The impact of a wildfire is typically directly related to the weather conditions. If wind speeds are lower and the relative humidity is higher, firefighters are more easily able to contain the wildfire. High wind speeds and low relative humidity make wildfires very difficult to control. They can become quick-moving, and even with trained firefighters and mutual aid, these fires can consume open rangeland, cattle, fencing, rural homesteads, and even entire communities. Due to similar characteristics of each jurisdiction, the entire county can be impacted in the following ways:

- Loss of power and communication lines
- Severe water and pressure loss due to high use of water resources
- Loss of cattle, other livestock, and fencing
- Highway dangers due to blowing smoke and fire along the shoulders
- Death and injuries of first responders and residents trying to protect their property, due to changing winds or a fast-moving fire

Vulnerabilities	
County	• County communication systems • County facilities, including: Courthouse, Library, Jail, Headstart Building, Airport, Maintenance Complex, Fairgrounds, DHS Office, PCS Office, Annex Building vehicles and equipment, specifically damage to emergency response vehicles and public works vehicles working to contain the fire • Death and/or injury of county employees at work to contain the fire
Kress	• City facilities, including: City Hall, Fire Department, Utility Infrastructure, Technology • City-owned vehicles and equipment, specifically damage to emergency response vehicles and public works vehicles working to contain the fire • Death and/or injury of city employees at work to contain the fire

Happy	- City facilities, including: City Hall, Fire Station, EMS Station, Utility Infrastructure, Technology - City-owned vehicles and equipment, specifically damage to emergency response vehicles and public works vehicles working to contain the fire - Death and/or injury of city employees at work to contain the fire
Tulia	- City facilities, including: City Hall, Fire Station, Police Department, Alternate Education Center, Community Center, Utility Infrastructure, Technology City-owned vehicles and equipment, specifically damage to emergency response vehicles and public works vehicles working to contain the fire - Death and/or injury of city employees at work to contain the fire
KISD	- Kress ISD, including: 1 Campus, Maintenance Complex, Residential Home (2), Bus Barn, Buses and Vehicles, and Technology - Death and/or injury of students and staff at the school at the time of the event - Lost educational time from school closures, accidents, and staff or student injuries
HISD	- Happy ISD, including: 1 Campus, Athletic Facilities, and Technology – damage to roofs, HVAC, windows, etc. - Death and/or injury of students and staff at the school at the time of the event - Lost educational time from school closures, accidents, and staff or student injuries
TISD	- Tulia ISD, including: 3 Campuses, Ag Barn, Maintenance and Bus Barn, School Vehicles – damage to roofs, HVAC, windows, etc. - Death and/or injury of students and staff at the school at the time of the event - Lost educational time from school closures, accidents, and staff or student injuries
SCHD	- Swisher County Hospital District’s medical facilities can be damaged including roofs, HVAC systems, windows, and vehicles. - Death and/or injury of staff at the time of the event.

Probability of Future Events

Historical patterns are assumed to be a dominant factor in determining future wildfire events. Based upon the historical instances of these events which have occurred in the area from 2006-2025, the MAT estimates the probability of a wildfire event somewhere in the County in any given year to be 30%. Due to the rural nature of the planning area, changes in population patterns, land use, and development will not affect the impacts of this hazard.

Years in the Record (2006-2025)	# of Wildfire Events that Occurred	Computation	Future Probability of a Wildfire Event
20 years	6	$(6/20) \times 100$	30%

Windstorm

Wind is simply air in motion moving from an area of higher atmospheric pressure to an area of lower atmospheric pressure. Although we cannot actually see air moving, we can measure its motion by the force that it applies on objects. Wind vanes indicate the wind's direction and anemometers measure the wind's speed.

Damaging winds are often called “straight-line” winds to differentiate the damage they cause from tornado damage. Strong thunderstorm winds can come from a number of different processes. Most thunderstorm winds that cause damage at the ground are a result of outflow generated by a thunderstorm downdraft. Damaging winds are classified as those exceeding 50-60 mph, although damage can occur with wind speeds in the 40-mph range.

Types of Damaging Winds:

- Straight-Line Wind – any thunderstorm wind that is not associated with rotation, mainly used to differentiate from tornadic winds
- Downdraft – small-scale column of air that rapidly sinks toward the ground
- Macroburst – an outward burst of strong winds at or near the surface with horizontal dimensions larger than 2.5 miles and occurs when a strong downdraft reaches the surface, damage from a microburst can look similar to tornado damage
- Microburst – a small concentrated downburst that produces an outward burst of strong winds at or near the surface, lasting 5-10 minutes with maximum wind speeds near 100 mph
- Downburst – a general term for all localized strong wind events that are caused by a strong downdraft within a thunderstorm
- Gust Front – the leading edge of rain-cooled air that clashes with warmer thunderstorm inflow, characterized by a wind shift, temperature drop, and gusty winds out ahead of a thunderstorm
- Derecho – a widespread, long-lived wind storm that is associated with a band of rapidly moving showers or thunderstorms; by definition, if the wind damage swath extends more than 240 miles and includes wind gusts of at least 58 mph, then the event may be classified as a derecho
- Haboob – a wall of dust that is pushed out along the ground from a thunderstorm downdraft

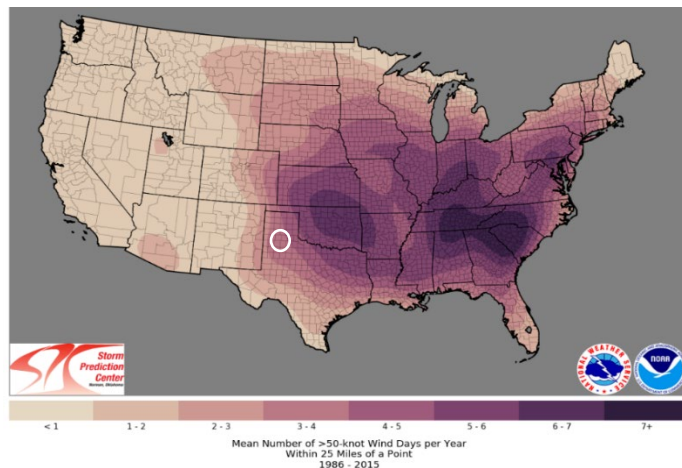
High winds are often associated with other hazards, such as hail and lightning with thunderstorms. High winds are combined with dry air and low humidity make wildfire ignitions a serious hazard. Once a wildfire has ignited, the high winds create volatile fire behavior that can be difficult to extinguish.

The Beaufort Wind Scale was developed in the early 1800s to help sailors estimate the winds via visual observations. Even though we now have modern methods to measure the wind speed and direction, this scale continues to be used to describe the impacts of winds at various speeds. This scale can also be used in reverse to estimate the strength of the wind based on the effects it has on the physical environment.

Beaufort Number	MPH		Terminology	Description
	Range	Avg.		
0	0	0	Calm	Calm. Smoke rises vertically.
1	1-3	2	Light air	Wind motion visible in smoke.
2	4-7	6	Light breeze	Wind felt on exposed skin. Leaves rustle.
3	8-12	11	Gentle breeze	Leaves and smaller twigs in constant motion.
4	13-18	15	Moderate breeze	Dust and loose paper are raised. Small branches begin to move.
5	19-24	22	Fresh breeze	Smaller trees sway.
6	25-31	27	Strong breeze	Large branches in motion. Whistling heard in overhead wires. Umbrella use becomes difficult.
7	32-38	35	Near gale	Whole trees in motion. Some difficulty when walking into the wind.
8	39-46	42	Gale	Twigs broken from trees. Cars veer on road.
9	47-54	50	Severe gale	Light structure damage.
10	55-63	60	Storm	Trees uprooted. Considerable structural damage.
11	64-73	70	Violent storm	Widespread structural damage.
12	74-95	90	Hurricane	Considerable and widespread damage to structures.

Location

Swisher County is located in the southern central part of the Texas Panhandle, and the entire county can expect to see windstorms. In general, the Panhandle sees high wind events, from both severe thunderstorms and frontal systems. Based on data from previous years, these events can happen any time of year. The map below shows the average number of days per year where the wind speed exceeds 50 knots (58 mph). Swisher County can expect at least 3-4 high wind days per year.



Climate Change

There are two main types of windstorms that impact the planning area: high winds associated with severe thunderstorms and high winds associated with dry, sunny conditions. As discussed in earlier sections, climate change can cause an increased intensity of severe thunderstorms and exacerbate drought conditions, which both lead to more severe windstorms. The impacts of climate change on local windstorm conditions are not yet thoroughly studied.

Extent and Previous Occurrences

All participating jurisdictions in the planning area can anticipate winds in excess of 40 mph several times during the year, which is an 8 or higher on the Beaufort Scale.

Location	Date	Type	Mag.	Deaths/ Injuries	Damage	Description
County	1/1/2006	High Wind	66.74 mph	0	\$0	
County	3/12/2006	High Wind	62.14 mph	0	\$0	
County	4/6/2006	High Wind	59.84 mph	0	\$0	
Happy	5/30/2006	Tstorm Wind	70.19 mph	0	\$0	
Tulia	6/16/2006	Tstorm Wind	63.29 mph	0	\$150K	Multiple utility poles were snapped and two barns were destroyed.
County	6/21/2006	High Wind	72.49 mph	0	\$20K	High winds severely damaged a mobile home near Vigo Park.
County	2/24/2007	High Wind	62.14 mph	0	\$0	
Kress	3/28/2007	Tstorm Wind	59.84 mph	0	\$0	
Happy	6/26/2007	Tstorm Wind	57.53 mph	0	\$0	
Happy	8/24/2007	Tstorm Wind	59.84 mph	0	\$10K	Downed tree limbs damaged fences in the area.
Kress	9/6/2007	Tstorm Wind	70.19 mph	0	\$10K	Winds damaged a cotton trailer.
County	3/2/2008	High Wind	42.57 mph	0	\$0	
County	4/1/2008	High Wind	66.74 mph	0	\$0	
Happy	5/25/2008	Tstorm Wind	64.44 mph	0	\$0	
Happy	8/14/2008	Tstorm Wind	64.44 mph	0	\$0	
County	4/4/2009	High Wind	44.88 mph	0	\$15K	High winds caused a fire in the County.
County	4/9/2009	High Wind	43.72 mph	0	\$0	
Kress	5/12/2009	Tstorm Wind	58.68 mph	0	\$50K	One automobile accident occurred due to the high winds and a few utility lines were downed.
Happy	6/4/2009	Tstorm Wind	58.68 mph	0	\$20K	High winds snapped several wooden power poles.
Vigo Park	6/14/2009	Tstorm Wind	59.84 mph	0	\$0	
Vigo Park	7/28/2009	Tstorm Wind	59.84 mph	0	\$0	
Tulia	9/25/2009	Tstorm Wind	60.99 mph	0	\$0	
County	12/8/2009	High Wind	59.84 mph	0	\$0	
County	5/10/2010	High Wind	64.44 mph	0	\$0	
Happy	6/23/2010	Tstorm Wind	67.89 mph	0	\$0	
Tulia	9/16/2010	Tstorm Wind	59.84 mph	0	\$30K	High winds downed multiple utility poles near Tulia.
County	2/27/2011	High Wind	63.29 mph	0	\$0	

Kress	5/31/2011	Tstorm Wind	57.53 mph	0	\$5K	High winds destroyed a barn.
Tulia	7/12/2011	Tstorm Wind	59.84 mph	0	\$150K	Power poles were blown down, causing a power outage in Tulia.
Tulia Airport	8/11/2011	Tstorm Wind	59.84 mph	0	\$25K	Power lines blow down in Tulia
Tulia	8/24/2011	Tstorm Wind	57.53 mph	0	\$0	
County	11/26/2011	High Wind	58.68 mph	0	\$0	
County	1/22/2012	High Wind	70.19 mph	0	\$75K	Downed utility lines and broken tree limbs
County	2/20/2012	High Wind	41.42 mph	0	\$0	
Happy	4/26/2012	Tstorm Wind	70.19 mph	0	\$0	
Tulia Airport	6/1/2012	Tstorm Wind	89.76 mph	0	\$8K	A partially upkept barn was destroyed.
Tulia	6/12/2012	Tstorm Wind	63.29 mph	0	\$0	
Kress	6/14/2012	Tstorm Wind	80.55 mph	0	\$40K	Four center pivots were overturned in Kress.
Kress	10/12/2012	Tstorm Wind	70.19 mph	0	\$0	
County	3/10/2013	High Wind	59.84 mph	0	\$0	
Kaffir	4/1/2013	Tstorm Wind	80.55 mph	0	\$0	
County	6/3/2013	High Wind	69.04 mph	0	\$0	
Happy	6/17/2013	Tstorm Wind	59.84 mph	0	\$1K	A carport was blown off a resident's home in Happy.
Tulia	9/27/2013	Tstorm Wind	69.04 mph	0	\$5K	Numerous downed power poles in Tulia.
County	4/27/2014	High Wind	42.57 mph	0	\$0	
Tulia	5/21/2014	Tstorm Wind	62.14 mph	0	\$50K	High winds damaged a few roofs, downed several trees that fell on vehicles, and overturned a semi-truck.
Tulia	6/6/2014	Tstorm Wind	58.68 mph	0	\$0	
Tulia	6/7/2014	Tstorm Wind	75.95 mph	0	\$10.35 M	High winds damaged several power poles and blew over a semi-truck. Multiple homes sustained roof and fence dam. Multiple crop fields were damaged.
Kaffir	6/8/2014	Tstorm Wind	70.19 mph	0	\$25K	High winds toppled around one dozen power poles.
County	6/19/2014	High Wind	58.68 mph	0	\$0	
County	7/1/2014	High Wind	58.68 mph	0	\$0	
Happy	4/22/2015	Tstorm Wind	66.74 mph	0	\$10K	Multiple buildings, vehicles, and crops were damaged due to the high winds.
Tulia	8/19/2015	Tstorm Wind	60.99 mph	0	\$0	
Tulia	10/21/2015	Tstorm Wind	62.14 mph	0	\$1K	Trees blown down in town.
Tulia	11/16/2015	Tstorm Wind	62.14 mph	0	\$0	

County	3/23/2016	High Wind	40.27 mph	0	\$2K	Power outages in Tulia due to downed lines.
County	4/26/2016	High Wind	65.59 mph	0	\$0	
Tulia	7/15/2016	Tstorm Wind	64.44 mph	0	\$0	
County	2/28/2017	High Wind	60.99 mph	0	\$0	
County	3/24/2017	High Wind	41.42 mph	0	\$0	
County	4/30/2017	High Wind	44.88 mph	0	\$0	
Tulia	6/8/2017	Tstorm Wind	70.19 mph	0	\$20K	High winds toppled multiple trees that damaged power lines, fences, and structures.
Tulia	7/16/2017	Tstorm Wind	57.53 mph	0	\$0	
Tulia	8/22/2017	Tstorm Wind	63.29 mph	0	\$0	
Tulia	10/6/2017	Tstorm Wind	66.74 mph	0	\$0	
County	3/18/2018	High Wind	57.53 mph	0	\$0	
County	4/13/2018	High Wind	57.53 mph	0	\$0	
Vigo Park	5/15/2018	Tstorm Wind	58.68 mph	0	\$0	
Vigo Park	5/17/2018	Tstorm Wind	65.59 mph	0	\$0	
Happy	6/9/2018	Tstorm Wind	64.44 mph	0	\$0	
County	6/24/2018	High Wind	66.74 mph	0	\$0	
Tulia	8/15/2018	Tstorm Wind	69.04 mph	0	\$0	
County	12/13/2018	High Wind	40.27 mph	0	\$0	
County	1/18/2019	High Wind	46.03 mph	0	\$0	
County	2/23/2019	High Wind	40.27 mph	0	\$0	
Tulia	3/9/2019	Tstorm Wind	65.59 mph	0	\$0	
County	3/13/2019	High Wind	40.27 mph	0	\$400K	Damage done to trees, utility lines, road signs, and traffic lights.
County	4/10/2019	High Wind	60.99 mph	0	\$0	
Tulia	5/4/2019	Tstorm Wind	63.29 mph	0	\$0	
Vigo Park	5/5/2019	Tstorm Wind	100.11 mph	0	\$20K	A metal barn anchored in concrete was completely destroyed.
Vigo Park	5/7/2019	Tstorm Wind	110.47 mph	0	\$70K	A metal barn was partially collapsed. A cattle feeder was tipped over. 19 wood transmission poles were snapped off.
County	5/21/2019	High Wind	59.84 mph	0	\$0	
County	5/23/2019	High Wind	57.53 mph	0	\$0	
County	9/30/2019	High Wind	70.19 mph	0	\$0	
County	11/26/2019	High Wind	63.29 mph	0	\$0	
County	11/30/2019	High Wind	59.84 mph	0	\$0	
County	2/25/2020	High Wind	47.18 mph	0	\$0	

County	5/7/2020	High Wind	63.29 mph	0	\$0	
Tulia	5/23/2020	Tstorm Wind	59.84 mph	0	\$0	
Tulia	8/29/2020	Tstorm Wind	65.59 mph	0	\$0	
County	1/14/2021	High Wind	57.53 mph	0	\$0	
County	1/30/2021	High Wind	44.88 mph	0	\$0	
County	3/17/2021	High Wind	49.48 mph	0	\$0	
County	4/23/2021	High Wind	57.53 mph	0	\$0	
Eunice	5/7/2021	Tstorm Wind	59.84 mph	0	\$0	
Vigo Park	6/25/2021	Tstorm Wind	66.74 mph	0	\$0	
Vigo Park	7/5/2021	Tstorm Wind	59.84 mph	0	\$0	
Tulia	8/12/2021	Tstorm Wind	66.74 mph	0	\$0	
County	10/27/2021	High Wind	59.84 mph	0	\$0	
County	12/15/2021	High Wind	44.88 mph	0	\$0	
County	1/14/2022	High Wind	57.53 mph	0	\$0	
County	2/16/2022	High Wind	57.53 mph	0	\$0	
County	2/21/2022	High Wind	58.68 mph	0	\$0	
County	3/23/2022	High Wind	59.84 mph	0	\$0	
County	3/29/2022	High Wind	67.89 mph	0	\$0	
County	4/1/2022	High Wind	64.44 mph	0	\$0	
County	4/22/2022	High Wind	60.99 mph	0	\$0	
Tulia	5/10/2022	Tstorm Wind	79.40 mph	0	\$0	
County	5/28/2022	High Wind	67.89 mph	0	\$0	
Happy	6/8/2022	Tstorm Wind	63.29 mph	0	\$0	
Happy	8/4/2022	Tstorm Wind	69.04 mph	0	\$0	
Vigo Park	8/29/2022	Tstorm Wind	57.53 mph	0	\$0	
County	12/28/2022	High Wind	65.59 mph	0	\$0	
County	1/11/2023	High Wind	58.68 mph	0	\$0	
County	2/14/2023	High Wind	67.89 mph	0	\$40K	High winds caused property damage and rolled multiple semi-tractors off the road.
County	2/22/2023	High Wind	41.42 mph	0	\$0	
County	2/26/2023	High Wind	72.49 mph	0	\$0	
County	3/24/2023	High Wind	69.04 mph	0	\$0	
County	3/31/2023	High Wind	57.53 mph	0	\$0	
County	4/4/2023	High Wind	59.84 mph	0	\$0	
Happy	5/18/2023	Tstorm Wind	58.68 mph	0	\$0	
Happy	6/3/2023	Tstorm Wind	59.84 mph	0	\$0	
Happy	6/11/2023	Tstorm Wind	65.59 mph	0	\$0	

Tulia	7/7/2023	Tstorm Wind	57.53 mph	0	\$0	
Vigo Park	7/8/2023	Tstorm Wind	59.84 mph	0	\$0	
Happy	7/15/2023	Tstorm Wind	60.99 mph	0	\$0	
Tulia	7/23/2023	Tstorm Wind	64.44 mph	0	\$0	
County	1/8/2024	High Wind	64.44 mph	0	\$0	
County	2/27/2024	High Wind	43.72 mph	0	\$0	
County	3/24/2024	High Wind	65.59 mph	0	\$0	
County	4/6/2024	High Wind	59.84 mph	0	\$0	
Tulia	6/6/2024	Tstorm Wind	64.44 mph	0	\$0	
Happy	6/25/2024	Tstorm Wind	58.68 mph	0	\$0	
Tulia	6/26/2024	Tstorm Wind	70.19 mph	0	\$0	
Happy	8/16/2024	Tstorm Wind	64.44 mph	0	\$0	
Tulia	9/21/2024	Tstorm Wind	72.49 mph	0	\$0	
Vigo Park	9/22/2024	Tstorm Wind	78.25 mph	0	\$0	
County	3/3/2025	High Wind	59.84 mph	0	\$0	
County	3/4/2025	High Wind	62.14 mph	0	\$0	
County	3/14/2025	High Wind	80.55 mph	0	\$0	
County	3/18/2025	High Wind	62.14 mph	0	\$0	
Tulia	4/23/2025	Tstorm Wind	75.95 mph	0	\$0	
Happy	6/2/2025	Tstorm Wind	58.68 mph	0	\$0	
Kaffir	6/4/2025	Tstorm Wind	80.55 mph	0	\$0	
Vigo Park	6/6/2025	Tstorm Wind	57.53 mph	0	\$0	
Vigo Park	7/21/2025	Tstorm Wind	64.44 mph	0	\$0	
Happy	9/22/2025	Tstorm Wind	60.99 mph	0	\$0	
Tulia	11/20/2025	Tstorm Wind	62.14 mph	0	\$0	
TOTAL	148 Events	Average: 62.07 mph		0	\$11.602 M	

Impact

High winds can cause considerable damage to people and property. Flying debris can cause injuries and death to both people and animals. High winds can damage homes, uproot trees, and more.

Vulnerabilities	
County	- County communication systems - County facilities, including: Courthouse, Library, Jail, Headstart Building, Airport, Maintenance Complex, Fairgrounds, DHS Office, PCS Office, Annex Building - County-owned vehicles and equipment, specifically damage to emergency response vehicles and public works vehicles required to still be out on the roads during windstorm events
Kress	- City communication systems - City facilities, including: City Hall, Fire Department, Utility Infrastructure, Technology – Roof, HVAC systems, glass windows, etc. - City-owned vehicles and equipment, specifically damage to emergency response vehicles and public works vehicles required to still be out on the roads during windstorm events
Happy	- City communication systems - City facilities, including: City Hall, Fire Station, EMS Station, Utility Infrastructure, Technology – Roof, HVAC systems, glass windows, etc. - City-owned vehicles and equipment, specifically damage to emergency response vehicles and public works vehicles required to still be out on the roads during windstorm events
Tulia	- City communication systems - City facilities, including: City Hall, Fire Station, Police Department, Alternate Education Center, Community Center, Utility Infrastructure, Technology – Roof, HVAC systems, glass windows, etc. - City-owned vehicles and equipment, specifically damage to emergency response vehicles and public works vehicles required to still be out on the roads during windstorm events
KISD	- Kress ISD, including: 1 Campus, Maintenance Complex, Residential Home (2), Bus Barn, Buses and Vehicles, and Technology – Roof, HVAC systems, glass windows, etc. - Lost educational time from school closures, accidents, and staff/student injuries
HISD	- Happy ISD, including: 1 Campus, Athletic Facilities, and Technology – damage to roofs, HVAC, windows, etc. - Lost educational time from school closures, accidents, and staff/student injuries
TISD	- Tulia ISD, including: 3 Campuses, Ag Barn, Maintenance and Bus Barn, School Vehicles – damage to roofs, HVAC, windows, etc. - Lost educational time from school closures, accidents, and staff/student injuries
SCHD	Swisher County Hospital District's medical facilities can be damaged including roofs, HVAC systems, windows, and vehicles.

Probability of Future Events

There is a high probability that Swisher County will see a windstorm event in the future. Based on the previous occurrences, there is a 740% chance of a wind event happening in a given year. Due to the rural nature of the planning area, changes in population patterns, land use, and development will not affect the impacts of this hazard.

Years in the Record Span (2006-2025)	# of Wind Events that Occurred	Computation	Future Probability of a Wind Event
20 Years	148 Events	$(148/20) \times 100$	740% each year

Winter Storm

Description

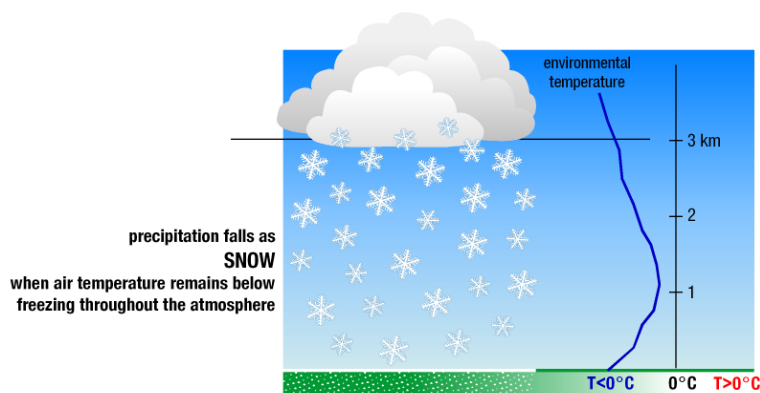
A winter storm is an event in which the main types of precipitation are snow, sleet, or freezing rain. Just like any other storm at other times of the year, the right combination of ingredients is necessary for a winter storm to develop.

There are three basic ingredients necessary to make a winter storm:

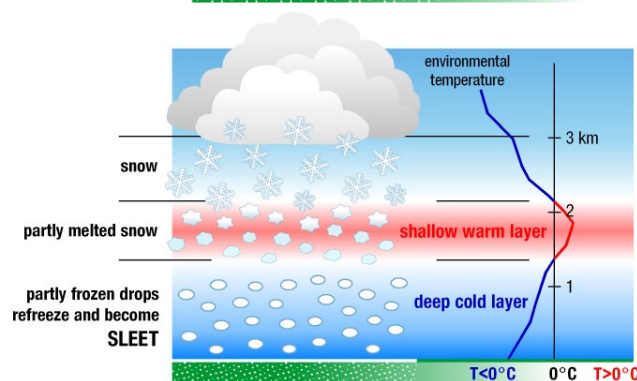
- **Cold Air** – Below freezing temperatures in the clouds and near the ground are necessary to make snow and/or ice.
- **Lift** – Something to raise the moist air to form the clouds and cause precipitation. An example of lift is warm air colliding with cold air and being forced to rise over the cold dome. The boundary between the warm and cold air masses is called a front. Another example of lift is air flowing up a mountainside.
- **Moisture** – To form clouds and precipitation, air blowing across a body of water, such as a large lake or the ocean, is an excellent source of moisture.

A winter storm is a combination of heavy snow, blowing snow, and/or dangerous wind chills. Blizzards are a combination of blowing snow and wind, resulting in very low visibilities. Sometimes strong winds pick up snow that has already fallen, creating a ground blizzard. An ice storm is a storm which results in the accumulation of at least 0.25 inches of ice on exposed surfaces. They create hazardous driving and walking conditions. Tree branches and power lines can easily snap under the weight of the ice.

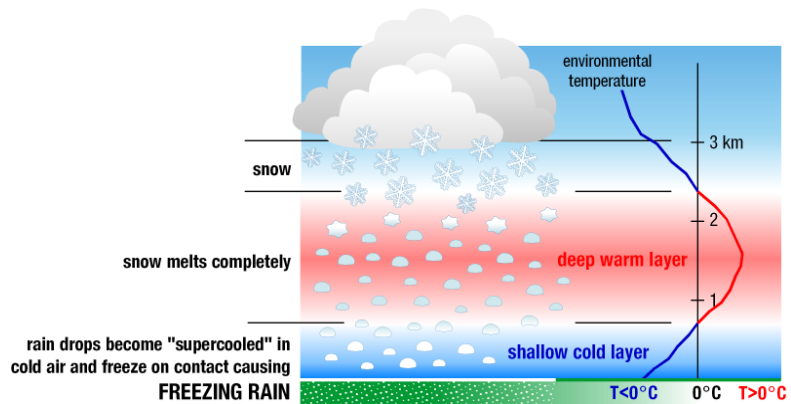
Snow – Most precipitation that forms in wintertime clouds starts out as snow because the top layer of the storm is usually cold enough to create snowflakes. Snowflakes are just collections of ice crystals that cling to each other as they fall toward the ground. Precipitation continues to fall as snow when the temperature remains at or below 32°F (0°C) from the cloud base to the ground.



Sleet – Sleet occurs when snowflakes only partially melt when they fall through a shallow layer of warm air. These slushy drops refreeze as they next fall through a deep layer of freezing air above the surface, and eventually reach the ground as frozen rain drops that bounce on impact.



Freezing Rain – Freezing rain occurs when snowflakes descend into a warmer layer of air and melt completely, then fall through another thin layer of freezing air just above the surface. They don't have enough time to refreeze before reaching the ground. Because they are "supercooled," they instantly refreeze upon contact with anything that is at or below 32°F (0°C), creating a glaze of ice on the ground, trees, power lines, or other objects. A significant accumulation of freezing rain lasting several hours or more is called an ice storm.



Location

Winter storms can affect the entire planning area often and with enough severity to be a threat to people, livestock, and property. Generally, the winter storm season runs from mid-November to mid-February, although severe winter weather has occurred as early as October and as late as March in some locations. Winter storms can impact the entire planning area uniformly.

Climate Change

Some research has been done on the impacts of climate change on winter weather, although mostly at the regional and global levels. Some of the key takeaways, include: Winters around the world are warming, but this warming does not necessarily mean an end to traditional winter weather in many places, at least not yet; Extreme precipitation events – including major winter snowstorms – are becoming more common because of climate change, and; Warming in the Arctic may be leading to a less stable jet stream, resulting in frigidly cold air spilling into areas not accustomed to seeing such as low temperatures for such long periods.

Extent and Previous Occurrences

Swisher County sees several rounds of winter precipitation in most years, 1.0 inch of snow to 10.5 inches of snow, ¼ of an inch of ice, temperatures between -26°F and 32°F with winds ranging from 0 to 60 mph. Below are previous occurrences of winter weather in the County.

Location	Date	Type	Deaths/ Injuries	Damage	Description
County	2/23/2006	Winter Wx	0	\$0	1 inch of snow in Tulia
County	11/29/2006	Heavy Snow	0	\$0	6 inches of snow in Happy
County	12/19/2006	Winter Wx	0	\$0	1 inch of snow in Tulia
County	12/19/2006	Ice Storm	0	\$0	Freezing drizzle caused icy conditions on highways
County	1/12/2007	Ice Storm	0	\$25K	¼ of ice accumulated on the roads in Tulia which caused multiple vehicle accidents
County	1/19/2007	Heavy Snow	0	\$0	9 inches of snow in Happy

County	2/1/2007	Winter Wx	0	\$0	1 inch of snow in Tulia
County	2/14/2007	Winter Wx	0	\$0	2 inches of snow in Tulia
County	4/7/2007	Winter Wx	0	\$0	3 inches of snow in Happy
County	12/14/2007	Winter Wx	0	\$0	1 inch of snow in Tulia
County	12/27/2007	Heavy Snow	0	\$75K	3 inches of snow in Tulia. Roadways were closed due to multiple vehicle accidents.
County	1/31/2008	Winter Wx	0	\$0	1 inch of snow in Tulia
County	1/26/2009	Winter Wx	0	\$0	1/10 of precipitation fell over the county
County	3/13/2009	Winter Wx	0	\$0	2 inches of snow in Kress
County	3/27/2009	Winter Wx	0	\$0	3 inches of snow in Vigo Park
County	11/29/2009	Winter Wx	0	\$0	1 inch of snow in Happy
County	12/7/2009	Winter Wx	0	\$0	60 mph winds in Tulia with freezing drizzle
County	12/23/2009	Winter Storm	0	\$0	6 inches of snow fell in Kress
County	12/24/2009	Blizzard	0	\$0	6 inches of snow fell in Kress
County	12/31/2009	Winter Wx	0	\$30K	2 inches of snow in Tulia. A motorist sustained minor injuries due to roadway conditions
County	1/28/2010	Winter Storm	0	\$0	4 inches of snow fell in Tulia
County	2/3/2010	Heavy Snow	0	\$0	4 inches of snow in Vigo Park
County	2/22/2010	Winter Wx	0	\$0	3 inches of snow in Tulia
County	3/1/2010	Winter Wx	0	\$0	2 inches of snow in Vigo Park
County	2/1/2011	Winter Wx	0	\$0	1 inch of snow in Vigo Park
County	2/6/2011	Winter Storm	0	\$0	4 inches of snow fell in Happy
County	2/8/2011	Winter Storm	0	\$0	Wind chill reached -26°F in Tulia with 5 inches of snow
County	10/27/2011	Winter Wx	0	\$0	2.5 inches of snow in Happy
County	12/5/2011	Winter Wx	0	\$0	3 inches of snow in Tulia
County	12/23/2011	Winter Wx	0	\$0	5 inches of snow in Tulia
County	2/12/2012	Winter Wx	0	\$0	3 inches of snow in Vigo Park
County	12/25/2012	Winter Wx	0	\$0	The County received a few tenths of an inch of snow
County	2/12/2013	Heavy Snow	0	\$0	5 inches of snow in Happy and Tulia
County	2/21/2013	Winter Wx	0	\$10K	Hazardous roadways from an inch of wintry mix caused several traffic accidents
County	2/24/2013	Blizzard	0	\$0	15 inches of snow in Tulia, 13 inches of snow in Happy, 8 inches of snow in Vigo Park, with 46 mph winds in Tulia
County	11/23/2013	Winter Storm	0	\$0	10.5 inches of snow fell in Happy
County	12/8/2013	Winter Wx	0	\$0	Freezing drizzle affected the entire County
County	12/21/2013	Winter Wx	0	\$5K	3 inches of snow in Happy. Road conditions caused a wreck near Tulia.
County	2/5/2014	Winter Wx	0	\$0	2 inches of snow in Vigo Park

County	11/16/2014	Winter Wx	0	\$0	2-4 inches of snow fell around the County
County	12/30/2014	Winter Wx	0	\$0	Freezing drizzle affected most of the County
County	1/2/2015	Winter Wx	0	\$0	Freezing rain affected most of the County
County	1/21/2015	Heavy Snow	0	\$0	4 inches of snow in Vigo Park
County	2/22/2015	Winter Wx	0	\$0	Light snow accumulations of less than an inch fell in the County
County	2/27/2015	Winter Wx	0	\$0	3 inches of snow in Tulia
County	3/4/2015	Winter Wx	0	\$0	3 inches of snow fell in Tulia
County	11/27/2015	Ice Storm	0	\$25K	Sleet and light snow accumulated across the County which caused multiple vehicle accidents
County	12/26/2015	Blizzard	0	\$200K	4 inches of snow in Tulia with 50-60 mph winds caused Blizzard conditions. Motorists became trapped on roadways, residents couldn't leave their homes, and commerce was stopped for days. Farmers lost crops.
County	1/5/2017	Winter Wx	0	\$0	2.3 inches of snow fell in Tulia
County	1/15/2017	Winter Wx	0	\$0	1.2 inches of snow fell in Tulia
County	10/24/2019	Winter Wx	0	\$0	2.5 inches of snow fell in Tulia
County	2/11/2020	Winter Wx	0	\$0	1-3 inches of snow fell around the County
County	4/13/2020	Winter Wx	0	\$0	1.5 inches of snow fell in Tulia
County	10/25/2020	Winter Storm	0	\$0	The County saw .5 – 4 inches of snow.
County	12/13/2020	Winter Wx	0	\$0	1.0 inch of snow fell in Vigo Park, 2.1 inches of snow fell in Tulia
County	1/10/2021	Winter Wx	0	\$0	2.5 inches of snow fell in Tulia
County	2/14/2021	Winter Storm	0	\$0	5 inches of snow fell in Happy with -12°F temperatures
County	2/16/2021	Winter Wx	0	\$0	2.0 inches of snow fell in Tulia
County	2/2/2022	Winter Wx	0	\$0	1.8 inches of snow fell in Tulia
County	2/12/2022	Winter Wx	0	\$0	1 inch of snow fell in Vigo Park
County	1/24/2023	Heavy Snow	0	\$0	8.5 inches of snow in Kress
County	10/29/2023	Winter Wx	0	\$0	Freezing drizzle occurred around the County
County	1/8/2024	Winter Wx	0	\$0	1 inch of snow fell in Tulia
County	2/11/2024	Winter Storm	0	\$0	5 inches of snow in Tulia
County	1/9/2025	Heavy Snow	0	\$0	5 inches of snow at Vigo Park
County	3/8/2025	Heavy Snow	0	\$0	4 inches of snow in Tulia
County	4/5/2025	Heavy Snow	0	\$0	7 inches of snow in Kress
County	12/4/2025	Winter Wx	0	\$0	3.5 inches of snow in Tulia
TOTAL		67 Events	0 Death	\$370K	

Impact

Winter storms can cause severe impacts across the planning area. Power outages can occur from the weight of the ice accumulation over power lines. Water and wastewater systems become vulnerable when temperatures get significantly below freezing, especially if the power is out. Roads become hazardous when icy and/or snow-packed, which leads to more accidents, and more emergency response vehicles to clear accidents, close roads, etc. Residents living in their homes without power and/or water can become a public health emergency as well.

Vulnerabilities	
County	- County Facilities, including: Courthouse, Library, Jail, Headstart Building, Airport, Maintenance Complex, Fairgrounds, DHS Office, PCS Office, Annex Building – damage from a power outage, frozen pipes, and/or roof damage - County-owned vehicles and equipment, specifically emergency response vehicles responding to accidents and other emergency situations during the winter storm - US Highways, State Highways, and County Roads throughout the entire County - Death and/or injury of county employees working to resolve the issues the winter storm created through vehicle accidents, public works, or other situations
Kress	- City Facilities, including: City Hall, Fire Department, Utility Infrastructure, Technology – damage from a power outage, frozen pipes, and/or roof damage - City-owned vehicles and equipment, specifically emergency response vehicles responding to accident and other emergency situations during the winter storm - Death and/or injury of city employees working to resolve the issues the winter storm created through vehicle accidents, public works, or other situations
Happy	- City Facilities, including: City Hall, Fire Station, EMS Station, Utility Infrastructure, Technology – damage from a power outage, frozen pipes, and/or roof damage - City-owned vehicles and equipment, specifically emergency response vehicles responding to accident and other emergency situations during the winter storm - Death and/or injury of city employees working to resolve the issues the winter storm created through vehicle accidents, public works, or other situations
Tulia	- City Facilities, including: City Hall, Fire Station, Police Department, Alternate Education Center, Community Center, Utility Infrastructure, Technology – damage from a power outage, frozen pipes, and/or roof damage - City-owned vehicles and equipment, specifically emergency response vehicles responding to accident and other emergency situations during the winter storm - Death and/or injury of city employees working to resolve the issues the winter storm created through vehicle accidents, public works, or other situations
KISD	- Kress ISD, including: 1 Campus, Maintenance Complex, Residential Home (2), Bus Barn, Buses and Vehicles, and Technology – damage to roofs, HVAC, windows, etc. - Lost educational time from school closures, accidents, and staff/student injuries
HISD	- Happy ISD, including: 1 Campus, Athletic Facilities, and Technology – damage to roofs, HVAC, windows, etc. - Lost educational time from school closures, accidents, and staff/student injuries
TISD	- Tulia ISD, including: 3 Campuses, Ag Barn, Maintenance and Bus Barn, School Vehicles – damage to roofs, HVAC, windows, etc. - Lost educational time from school closures, accidents, and staff/student injuries

SCHD	- Swisher County Hospital District's medical facilities can be damaged including roofs, HVAC systems, windows, and vehicles. - Icy and dangerous traveling conditions for staff could cause death and/or injury.
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Probability of Future Events

Historical patterns are assumed to be a dominant factor in determining future winter weather events. Based upon the historical instances of these events which have occurred in the area during the last 20 years, the MAT estimates the probability of a winter weather event somewhere in the County in any given year to be 335%. Due to the rural nature of the planning area, changes in population patterns, land use, and development will not affect the impacts of this hazard.

Years in the Record Span (2006-2025)	# of Winter Storm Events that Occurred	Computation	Future Probability of a Winter Weather Event
20 Years	67 Events	$(67/20) \times 100$	335% each year

Element C – Mitigation Strategy

Existing Authorities, Policies, Programs, and Resources (C1)

Existing authorities include: Robert T. Stafford Disaster Relief and Emergency Assistance Act, Section 104 of the Disaster Mitigation Act of 2000 (DMA 2000) (P.L. 106-390), and the Bunning Bereuter-Blumenauer Flood Insurance Reform Act of 2004 (P.L. 108-264), which amended the National Flood Insurance Act (NFIA) of 1968 (42 U.S.C. 4001, et al).

Additionally, the Plan complies with the Interim Final Rules for the Hazard Mitigation Planning and Hazard Mitigation Grant Program (44 CFR, Part 201), which specify the criteria for approval of mitigation plans required in Section 322 of the DMA 2000 and standards found in FEMA’s “Local Mitigation Plan Review Guide” (April 2023), and the “Local Mitigation Planning Handbook” (March 2013).

The City of Kress is a General Law Type A municipality, meaning they have no charter and may only exercise those powers that are specifically granted or implied by statute. The City of Happy is a General Law Type C municipality, meaning it also has no charter and may only exercise those powers that are specifically granted or implied by statute. The City of Tulia is a Home Rule municipality, which means it operates under its own charter and may exercise any powers not prohibited by law. These cities have the authority and capabilities to support efforts to implement mitigation actions identified in this document. When reviewing current plans and ordinances, City/County staff will align the hazard mitigation plan’s goals with those of the jurisdiction. The hazard mitigation plan will be integrated into other planning mechanisms while considering the goals of the jurisdiction. The table below summarizes these authorities and capabilities along with common planning tools/mechanisms that FEMA suggests contribute to local mitigation activities.

	Building Code	Zoning Ordinance	Subdivision Ordinance or Regulation	Special Purpose Ordinances (floodplain management, etc.)	Growth Management Ordinance	Site Plan Review Requirements	Capital Improvement Plan	Economic Development Plan	Emergency Operations Plan	Post-Disaster Recovery Plan	Post-Disaster Recovery Ordinance	Real Estate Disclosure Requirements	Other: Annual Budget Review
Swisher County				X					X	X			X
City of Happy	X	X		X		X			X	X	X		X
City of Kress				X					X	X			X
City of Tulia	X	X	X	X		X	X	X	X	X			X
Happy ISD							X	X	X	X			X
Kress ISD							X	X	X				X
Tulia ISD							X	X					X
Swisher County Hospital District									X	X			X

National Flood Insurance Program (NFIP) C2)

As described earlier in this document, flooding occurs occasionally within the County, with most of these events being caused by heavy rainfall. Below is a table listing the details for both jurisdictions regarding the NFIP. The Texas Water Development Board maintains a current list of County and City Floodplain Administrators (FPA).

CID	Jurisdiction	Status	Map Date	FPA & Title
481010	Swisher County	Participating	7/1/1987	Michael Clawson, County Judge
481011	City of Happy	Participating	9/1/2007	N. Scott Downing, City Secretary
481012	City of Kress	Participating	2/21/1975	Johnny Taylor, Mayor
480581	City of Tulia	Participating	3/1/1988	Russell Proctor, Public Works Director

Swisher County, the Cities of Happy, Kress, and Tulia will continue to comply with the NFIP. This includes SI/SD determinations and the requirement of owners to obtain permits to bring substantially improved or substantially damaged buildings into compliance with the floodplain management requirements. Swisher County, the cities of Happy, Kress, and Tulia will continue to regulate and permit developments within Special Flood Hazard Areas (SFHAs) by continuously monitoring these SFHAs and ensuring developers are following strict guidelines in order to protect critical infrastructure. The participating cities follow FEMA's requirements for regulating and permitting. Specific building requirements are enforced for developments within the SFHAs and permits are required for all proposed construction projects.

Goals to Reduce/Avoid Long-Term Vulnerabilities (C3)

The goals and objectives of this hazard mitigation plan reflect the goals similar to those found in the State of Texas Mitigation Plan and the National Flood Insurance Program. The Swisher County MAT began the update process for the hazard mitigation plan by agreeing to a common set of goals and objectives, flexible enough they could be used to formulate customized mitigation actions for local implementation. The goals and objectives of the planning area are provided below.

Goal 1: Protect public health and safety

Objective 1.1: Advise the public about health and safety precautions to guard against injury and loss of life from hazards.

Objective 1.2: Maximize the use of modern technology to provide adequate warning, communication, and mitigation of hazards.

Objective 1.3: Reduce the danger to, and enhance protection of, dangerous areas during hazards.

Objective 1.4: Protect critical infrastructure facilities and critical services.

Goal 2: Protect existing and new properties

Objective 2.1: Use the most cost-effective approaches to protect existing and new building and public infrastructure from hazards.

Objective 2.2: Work to develop local guidance to ensure that development will not inadvertently endanger the public or increase threats to existing and new properties.

Goal 3: Increase public understanding, support, and demand for hazard mitigation

Objective 3.1: Increase public awareness of the full range of natural and man-made hazards they face.

Objective 3.2: Educate the public on actions they can take to prevent or reduce the loss of life or property from all hazards.

Objective 3.3: Publicize and encourage the adoption of appropriate hazard mitigation measures.

Objective 3.4: Encourage public policy to promote mitigation activities among the local jurisdiction.

Goal 4: Promote growth in a sustainable manner

Objective 4.1: Incorporate hazard mitigation into the long-range planning and development activities.

Objective 4.2: Encourage developers to voluntarily use codes and standards that will help to prevent the creation of future hazards to life and property.

Goal 5: Maximize the use of outside sources of funding

Objective 5.1: Maximize the use of outside sources of funding.

Objective 5.2: Maximize participation of residents in protecting their welfare and their properties.

Objective 5.3: Maximize insurance coverage to provide financial protection against hazards.

Criteria for Prioritizing Actions

Considering detailed benefit-cost analysis for every potential mitigation activity can be time consuming and may not always be practical. In using the criteria and scoring below, the MAT was able to consistently score each action as High, Medium, or Low.

Evaluation Worksheet		
Rank each of the criteria with a -1, 0, or 1 using the following scale 1 = Highly effective or feasible 0 = Neutral -1 = Ineffective or not feasible		
Score	Criteria	Description
	Life Safety	How effective will the action be at protecting lives and preventing injuries?
	Property Protection	How significant will the action be at eliminating or reducing damage to structures and infrastructure?
	Technical	Is the mitigation action technically feasible? Is it a long-term solution?
	Political	Is there overall public support for the mitigation action? Is there the political will to support it?
	Legal	Does the community have the authority to implement the action?
	Environmental	What are the potential environmental impacts of the action? Will it comply with environmental regulations
	Social	Will the proposed action adversely affect one segment of the population?
	Administrative	Does the community have the personnel and administrative capabilities to implement the action and maintain it?
	Local Champion	Is there a strong advocate for the action or project among local departments and agencies that will support the action's implementation?
	Other Community Objectives	Does the action advance other community objectives, such as capital improvements, economic development, environmental quality, or open space preservation?
	Total Score	
Score Key High = 6-10 Medium = 3-5 Low = < 3		

Mitigation Action Items (C4/C5)

1	Hazards Addressed	Drought
Integrate the use of water-efficient fixtures, appliances, and systems (e.g. low-flow toilets, faucet aerators, on-demand recirculation systems) into new/existing construction projects to reduce water consumption.		
Participating Jurisdiction(s)		Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District
Objective(s) Addressed		1.2, 4.1
Priority (High, Medium, Low)		Medium
Estimated Cost		TBD
Potential Funding Source(s)		Local budget, Grant funds
Lead Agency / Dept Responsible		County Commissioners, City Management, ISD Board, Hospital Administration
Implementation Schedule		Within 1 month upon need identified
Cost Effectiveness: Using water-efficient equipment and smart conservation techniques will reduce the amount of water being used at jurisdiction facilities. In time, the reduction in the jurisdiction’s monthly water bills will more than offset the cost of the equipment.		
Discussion: The evidence is clear that water conservation is practical and cost-effective, the jurisdictions are replacing appliances as needed. The County had toilets replaced in the Jail and the Courthouse. The Cities of Kress and Tulia have installed leak detection systems in all of their water meters. All of the ISD’s have recently completed renovations on most of their bathrooms. This action is continuing from the 2019 plan as the jurisdictions still have projects they would like to complete. This is a new action for Swisher County Hospital District as this is their first plan.		

2	Hazards Addressed	Drought, Flooding, Hail, Lightning, Tornadoes, Wildfires, Windstorms, and Winter Storms
Educate the public on mitigation strategies for all hazards.		
Participating Jurisdiction(s)	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District	
Objective(s) Addressed	1.1, 1.2, 3.1, 3.2, 3.3, 3.4, 5.2	
Priority (High, Medium, Low)	High	
Estimated Cost	\$1,000	
Potential Funding Source(s)	Local budget, grant funds, business donations, volunteers	
Lead Agency / Dept Responsible	County Emergency Management, City Management, Fire Departments, Law Enforcement, ISD Admin	
Implementation Schedule	Throughout the 5-year update period	
Cost Effectiveness: Outreach activities are very cost effective; they can be used to engage the public at-large in their own protection by educating them on the risks associated with the hazards and the actions they can take to avoid those risks.		
Discussion: Public education campaigns through social media, safety brochures, and educating school children can all help increase public awareness of hazards. The objective of this action is to make residents aware that the hazards should be taken seriously. This is a continuing action from the 2019 plan.		

3	Hazards Addressed	Hail, Flooding, Winter Storms, Tornadoes, Wildfires, Lightning, and Windstorms
Purchase outdoor warning systems for locations throughout the entire planning area. Expand the outdoor warning system for new development and unincorporated areas.		
Participating Jurisdiction(s)	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD	
Objective(s) Addressed	1.1, 1.2, 1.3, 2.1, 3.1, 5.1	
Priority (High, Medium, Low)	Medium	
Estimated Cost	\$45,000 (siren)	
Potential Funding Source(s)	Grant funds, local budget, business donations, volunteers	
Lead Agency / Dept Responsible	County Commissioners, City Management, ISD Admin	
Implementation Schedule	Within 12 months of securing the necessary funding	
Cost Effectiveness: Outdoor warning sirens are still a very effective warning method, and there are areas of the planning area that need updated sirens. The benefit of providing warning to residents prior to a hazard far outweighs the cost of installing warning systems.		
Discussion: Purchase outdoor warning systems to alert residents to a potential emergency or provide directions for all hazards. The City of Kress has recently replaced 1 siren that can be set to alert from a phone. This action is continuing from 2019 because while some progress has been made, the jurisdictions still have projects they would like to complete. This is a new action for Swisher County Hospital District as this is their first plan.		

4	Hazards Addressed	Drought
Update the City's Drought Contingency Plan; integrating strategies to further reduce water consumption cost-effectively.		
Participating Jurisdiction(s)	City of Happy, City of Kress, City of Tulia	
Objective(s) Addressed	3.2, 3.3, 3.4, 4.1, 5.2	
Priority (High, Medium, Low)	Medium	
Estimated Cost	TBD	
Potential Funding Source(s)	Local budget, Grant funds	
Lead Agency / Dept Responsible	City Council, City Public Works	
Implementation Schedule	Annual review of plan to ensure water conservation measures are adequate and effective	
Cost Effectiveness: This action is ongoing from the 2019 plan. The key to this action is to update the plan with conservation measures that are practically implemented and cost-effective.		
Discussion: Drawing on guidance from local water districts and planning groups to implement proactive water conservation measures into the Plan based on Ogallala aquifer projects and on the US Drought Monitor drought intensity levels. The Cities of Tulia, Kress, and Happy update their Drought Contingency Plan every 5 years. The City of Tulia brings in High Plains Water District to do an assessment, which greatly benefits their plan. This item is ongoing from the previous plan.		

5	Hazards Addressed	Hail, Windstorms, Tornadoes, Severe Winter Storm
Install hail-resistant vehicle coverings at their facilities.		
Participating Jurisdiction(s)	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District	
Objective(s) Addressed	1.4, 2.1, 4.1, 5.3	
Priority (High, Med, Low)	Medium	
Estimated Cost	TBD	
Potential Funding Source(s)	Grant Funds, Local Funds	
Lead Agency / Dept	County Commissioners, City Council, ISD Boards	
Implementation Schedule	Implementation based on need and availability of funding	
Cost Effectiveness: The installation of covered parking would be a minimal cost compared to continuous repairs on County, City, and Hospital vehicles and equipment.		
Discussion: This action is continued from the 2019 plan for the City of Tulia, but it is deferred for the remaining jurisdictions. While the priority for hail resistant coverings is high, the funding opportunities are low, leaving the jurisdictions to cover the cost themselves. The City of Tulia installed vehicle coverings at City Hall and the Police Department. This is a new action for Swisher County Hospital District as this is their first plan.		

6	Hazards Addressed	Hail, Windstorms, Tornadoes, Severe Winter Storm
<i>Install hail-resistant vehicle coverings at their facilities and hail-resistant roofing and window coverings on critical facilities / structures.</i>		
Participating Jurisdiction(s)	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District	
Objective(s) Addressed	1.4, 2.1, 4.1, 5.3	
Priority (High, Med, Low)	Medium	
Estimated Cost	TBD	
Potential Funding Source(s)	Grant Funds, Local Funds	
Lead Agency / Dept	County Commissioners, City Council, ISD Boards	
Implementation Schedule	Implementation based on need and availability of funding	
Cost Effectiveness: Installation of hail-resistant roofing and window coverings would minimize damage on critical facilities, making this mitigation item very cost effective.		
Discussion: This action is continued from the 2019 plan for the County, the City of Kress and Happy, and Tulia ISD. It is deferred for the remaining jurisdictions. The jurisdictions are replacing roofs as funding becomes available. The City of Kress has recently installed a new roof on the Fire Department. The County has replaced roofs on the show barn, and the precinct barns. The City of Happy has replaced the roof on their Fire Station. Tulia ISD had the roof replaced on the school. This is a new action for Swisher County Hospital District as this is their first plan.		

7	Hazards Addressed	Hail, Tornadoes, Windstorms
Follow building codes that require construction of safe rooms in new school campuses; and assist, where possible, with retrofitting new/existing school campuses with shelters.		
Participating Jurisdiction(s)	Happy ISD, Kress ISD, Tulia ISD	
Objective(s) Addressed	1.2, 1.4, 2.2	
Priority (High, Med, Low)	Medium	
Estimated Cost	\$1,000,000 per campus for existing campuses; \$3,000,000	
Potential Funding Source(s)	Grant Funds/District Funds	
Lead Agency / Dept	ISD Administration, County Officials, City Management	
Implementation Schedule	Upon approval of funds	
Cost Effectiveness: The ISDs can incorporate multi-purpose safe rooms into new/retrofit projects so that they can be used to provide shelter as needed, but also support everyday scholastic activities; in effect, the investment will return daily benefits.		
Discussion: This action is a continuing project from the 2019 plan for Kress ISD and Tulia ISD, it is deferred for Happy ISD. As the schools develop and funding becomes available, safe rooms will be installed. Currently, Kress ISD is in the middle of constructing an above ground tornado shelter that will be available for use at the beginning of the 26/27 school year. The City of Tulia has just added onto their safe room in the elementary school to make it more ADA accessible.		

8	Hazards Addressed	Hail, Tornadoes, Windstorms
Equip newly constructed or retrofitted County or City-owned facilities with a safe room.		
Participating Jurisdiction(s)	Swisher County, City of Happy, City of Kress, City of Tulia	
Objective(s) Addressed	1.2, 1.4, 2.2	
Priority (High, Med, Low)	High	
Estimated Cost	TBD	
Potential Funding Source(s)	Grant Funds/District Funds	
Lead Agency / Dept	County Officials, City Management	
Implementation Schedule	Upon approval of funds	
Cost Effectiveness: The County and Cities can install safe rooms at various facilities to ensure residents have a safe place to go during events. The safety of residents will outweigh the cost of the safe room.		
Discussion: This action is a deferred project from the 2019 plan. As funding becomes available, safe rooms will be installed.		

9	Hazards Addressed	Hail, Lightning, Tornados, Windstorms, Wildfire, Severe Winter Storm
Install emergency generators at water distribution facility, city well fields, and sirens.		
Participating Jurisdiction(s)	Swisher County, City of Happy, City of Kress, City of Tulia	
Objective(s) Addressed	1.2, 1.4, 2.2	
Priority (High, Med, Low)	High	
Estimated Cost	\$250,000, dependent on power needs	
Potential Funding Source(s)	Grant Funds, Local budget	
Lead Agency / Dept	City officials, City Public Works	
Implementation Schedule	Within 12 months of securing the necessary funding	
Cost Effectiveness: Ensuring that water is available to the Cities makes the cost irrelevant.		
Discussion: This action was carried over from the 2019 plan as a continuing action. The City of Kress has one well backed up. The City of Tulia has the lift station backed up and they have the capability to back up every well if needed with a portable generator. The City of Happy has both wells backed up with an emergency generator.		

10	Hazards Addressed	Flooding
Improve storm water drainage/control systems; particularly in flood prone areas of the County, City, and ISD Campus, by adding or enlarging guttering, culverts, and bar ditches to direct water to safe discharge areas. Alternatively, purchase portable pumps for emergency water removal.		
Participating Jurisdiction(s)	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD	
Objective(s) Addressed	1.2, 1.3, 1.4, 4.1, 5.1	
Priority (High, Med, Low)	Medium	
Estimated Cost	TBD	
Potential Funding Source(s)	Local budget, Grant funds	
Lead Agency / Dept	County/City Officials, ISD Administration	
Implementation Schedule	Within 12 months after securing the necessary funding	
Cost Effectiveness: Over time, the one-time cost of making improvements to a roadway frequently damaged by flooding events will be less than the cumulative costs of making repairs to infrastructure following each flooding event.		
Discussion: This is a continuing action from 2019. All of the jurisdictions regularly clean their culverts, but are always looking for new funding opportunities to direct water off of roadways and to safe discharge areas.		

11	Hazards Addressed	Tornadoes and Winter Storms
Develop/maintain a list of functional needs residents for welfare checks during prolonged winter storm events and identify locations of personal underground shelters for welfare checks following a tornado.		
Participating Jurisdiction(s)	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District	
Objective(s) Addressed	1.3, 1.4, 5.1	
Priority (High, Medium, Low)	Medium	
Estimated Cost	Minimal	
Potential Funding Source(s)	Local budget, Grant funds	
Lead Agency / Dept Responsible	County and City Administration	
Implementation Schedule	Continuing	
Cost Effectiveness: The cost of this action is minimal.		
Discussion: This action is continuing from the 2019 plan. The County has one started, but it needs to be updated and maintained. Swisher Co-op has a list of residents who are high risk, which the jurisdictions are able to refer to if needed. This is a new action for Swisher County Hospital District as this is their first plan.		

12	Hazards Addressed	Lightning, Tornadoes, Windstorms, and Winter Storms
Supply critical facilities with back-up power supply.		
Participating Jurisdiction(s)	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District	
Objective(s) Addressed	1.4, 2.1, 5.1	
Priority (High, Medium, Low)	High	
Estimated Cost	\$45,000	
Potential Funding Source(s)	Local budget, Grant funds	
Lead Agency / Dept Responsible	County Commissioners, Hospital Admin., City Management, ISD Administration	
Implementation Schedule	Within 12 months of securing necessary funding	
Cost Effectiveness: Action projected to have a benefit greater than the cost of equipment; from avoided damages to internal systems/equipment that could otherwise result from a power loss.		
Discussion: The participant must maintain electrical power at their critical facilities at all times to run emergency operations and continue service, especially during extended outages. This action is continuing from 2019, the jurisdictions are still working to complete this project. Several generators have been installed, but work still needs to be done. This is a new action for Swisher County Hospital District as this is their first plan.		

13	Hazards Addressed	Flooding and Winter Storms
Use weather-resistant paving materials on resurfacing/road construction projects to minimize surface damage due to winter storms.		
Participating Jurisdiction(s)	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD	
Objective(s) Addressed	1.2, 1.3, 5.1	
Priority (High, Medium, Low)	Medium	
Estimated Cost	TBD	
Potential Funding Source(s)	Local budget, Grant funds	
Lead Agency / Dept Responsible	County Commissioners, City Public Works, ISD Administration	
Implementation Schedule	Within 12 months of securing funding	
Cost Effectiveness: There are a number of paving products available that are designed to withstand harsh weather conditions and are economical. The cost of these products is offset by reduced maintenance and replacement costs.		
Discussion: This action is deferred from the 2019 plan. Recent advancements in asphalt paving technology can be applied when resurfacing local roads, helping them to stand up better to harsh weather conditions. This technology could greatly reduce the frequency and cost of maintenance. Keeping the roads in better repair will make them safer to travel.		

14	Hazards Addressed	Wildfires and Winter Storms
Establish and maintain a fire-safe defensible space around critical facilities in sectors in or bordering Wildland-Urban Interface (WUI) areas.		
Participating Jurisdiction(s)	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District	
Objective(s) Addressed	1.3, 2.2, 4.1	
Priority (High, Medium, Low)	Medium	
Estimated Cost	\$5,000 in annual costs	
Potential Funding Source(s)	Local budget	
Lead Agency / Dept Responsible	County Maintenance, City Public Works, ISD Maintenance	
Implementation Schedule	Continuous	
Cost Effectiveness: Establishing and maintaining a fire-safe defensible space around critical facilities is an easy, low-cost way to create a buffer zone to limit the potential for wildfire damage.		
Discussion: This action will reduce the likelihood that a critical facility, such as a fire station, will be affected by this type of hazard event. This will also reduce threat of wildfire for people inside the facility and increase the jurisdiction’s ability to adequately respond to an event during a wildfire event. This is a continuing action from the 2019 plan. The jurisdictions all mow regularly. The City of Tulia has a roll off dumpster that community members sign up to use free of charge, which helps encourage citizens to keep their properties free of trash. This is a new action for Swisher County Hospital District as this is their first plan.		

15	Hazards Addressed	Flooding
To work with TxDOT to identify low crossing areas throughout the County and to install signs and gauges in these trouble areas.		
Participating Jurisdiction(s)		Swisher County, City of Happy, City of Kress, City of Tulia
Objective(s) Addressed		1.1, 1.2, 1.3, 2.1, 3.1, 5.1
Priority (High, Medium, Low)		Medium
Estimated Cost		TBD
Potential Funding Source(s)		Local budget, Grant funds
Lead Agency / Dept Responsible		County administration
Implementation Schedule		Within 24 months of securing funding
Cost Effectiveness: Cost is low compared to the cost of water saving measures.		
Discussion: Purchasing signs and gauges will assist the County and Cities in closing off roads during heavy rains. These warnings will prevent citizens from driving on hazardous roadways, which will save first responders from having to perform water rescues. While the County has some gauges permanently installed in these areas, there are still many projects the Cities and County would like to pursue so this is a continuing action from the 2019 plan.		

16	Hazards Addressed	Drought, Flooding, Hail, Lightning, Tornadoes, Wildfires, Windstorms, and Winter Storms
To work with the ISD's to repurpose old school buses as mobile command units to assist in hazard education, hazard preparedness, and hazard response.		
Participating Jurisdiction(s)	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District	
Objective(s) Addressed	1.1, 1.3, 3.1, 4.1, 5.1, 5.2	
Priority (High, Medium, Low)	Medium	
Estimated Cost	TBD, minimal	
Potential Funding Source(s)	Local budget, Grant funds	
Lead Agency / Dept Responsible	County administration, ISD administration, City Officials, Hospital Administration	
Implementation Schedule	Within 24 months of securing funding	
Cost Effectiveness: Cost is low since the ISD's would be providing old school buses at a reduced cost.		
Discussion: Repurposing an old school bus as a mobile command unit will assist the County, Cities, and Hospital District in educating the public on why mitigation is so important and it will also serve as a mobile hub of information when/if a disaster strikes. This is a new action for Swisher County Hospital District as this is their first plan.		

17	Hazards Addressed	Drought, Flooding, Hail, Lightning, Tornadoes, Wildfires, Windstorms, and Winter Storms
Expand and maintain mass notification enrollment through public outreach campaigns, community events, school partnerships, and utility billing inserts to increase resident participation.		
Participating Jurisdiction(s)	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District	
Objective(s) Addressed	1.2, 1.4, 2.2	
Priority (High, Medium, Low)	Medium	
Estimated Cost	TBD - minimal	
Potential Funding Source(s)	Local budget, Grant funds	
Lead Agency / Dept Responsible	County Administration, City Officials, School Administration, Public Works Department, Finance Office	
Implementation Schedule	Within 12 months of securing funding	
Cost Effectiveness: The cost of raising awareness to the public alert system far outweighs the cost of lives lost during a hazard.		
Discussion: Swisher County uses the Wireless Emergency Management Systems (WENS) as a mass notification alert system during emergencies. Increasing the number of residents enrolled in the mass notification system will ensure that residents are alerted of incoming hazards well ahead of time. While the City of Tulia has become very comfortable sending these alerts out for all issues, they could still benefit from getting more community members signed up. The remaining jurisdictions have very few residents signed up as participants in WENS and are going to make this a priority within the next 5 years. This is a new action for Swisher County Hospital District as this is their first plan.		

Element D – Plan Maintenance

Continued Public Participation Process (D1)

The MAT will conduct public mitigation action strategy update presentations during the 5-year period. A press release will be issued to The Swisher County News, in addition to internal newsletters and email lists within the City governments, County governments, and ISDs. Meetings held locally will ensure public participation with the focus being on their own strategies. County and City residents will be given a forum to submit any additional identified areas of concern to possibly vet out action items in the future. Approximately one year prior to expiration, the MAT will convene to update the existing plan with actions collected from local meetings.

The HMP will be posted on a regionally shared portal, which will allow the public to access the document at any time. A point of contact is provided for every plan in the portal; the PRPC will be responsible for ensuring the contact list stays current. As an alternate, the PRPC's contact information will also be provided to ensure that public inquiries and comments are properly channeled for processing to the appropriate County or City point of contact on a timely basis.

Monitoring (D2)

MAT participants will be responsible for evaluating the plan annually for updates to jurisdictional goals, objectives, and action items. If needed, these participants will coordinate through the MAT Chairperson to integrate these updates into the Plan. A record of those changes will be maintained in the plan. The MAT chairperson will be responsible for monitoring the overall plan for updates on an annual basis.

Monitoring and evaluation involves the ongoing process of compiling information on the outcomes from the implementation of the hazard mitigation objectives. The goal is to determine whether the planning area's vulnerability has decreased as a result of the plan. When vulnerability has decreased as a result of identified mitigation actions, the plan participants will determine why and will implement successful mitigation actions in other locations. Where vulnerability has increased, or remained constant, the plan participants will identify if other potential mitigation strategies may be more successful.

Method and Schedule for Keeping Plan Current			
Monitoring/Evaluate	How	When	By Whom
	The plan and action items will be evaluated on an annual basis to determine effectiveness of the programs. Element A: Continue to recruit members for the mitigation team members. Evaluate public satisfaction with the outreach method and level of input they were allowed to provide through an annual survey. Element B: Participants will provide any new development of hazard history that may impact changes in priorities. Monitor new information from the NWS and TFS Wildfire Risk for new maps and history. Element C: Existing strategies will be evaluated and priorities adjusted based on hazard history. Lead agency/departments will continually monitor action items as they are implemented. Through the Mitigation Action Item Monitoring Form, they will inform the MAT of the status of the action and target completion date. Element D: Monitor the status for existing strategies. Identify how the plan was utilized to recognize new projects or to re-prioritize existing strategies. As development changes occur, they will be incorporated in to the plan and strategies can be adjusted according to the increase or decrease in growth. Review of the overall goals and using the scoring criteria – will provide clear measurement of the actions.	Quarterly updates and upon completion	Responsible departments identified for each action for each jurisdiction. Participating Jurisdictions, Responsible Departments, MAT Members
Method and Schedule for Keeping Plan Current			

	How	When	By Whom
Update	The MAT will update this plan every 5 years. However, through the annual evaluation, each participating jurisdiction will provide any changes to the existing plan to the MAT Chairmen. Approximately one year prior to the expiration, all participating jurisdictions will begin the formal update process. The Formal process will begin with a county-wide meeting which will include all participating jurisdictions. Tasks will be established for each jurisdiction: 1) to review prior mitigation action items and 2) document hazards that have occurred in the last several years. Each participating jurisdiction will hold “jurisdictional” meetings to solicit feedback from the public during this process. Surveys will be extended to the entire county to determine changes in mitigation planning at the resident level. This process will culminate in the several meetings to review the information taken and to formally update plan. Plan will be submitted to the State and to FEMA for approval.	Every 5 years	Participating Jurisdictions, Responsible Departments, MAT Members

The MAT will conduct an annual meeting intended for all plan participants for the purpose of monitoring and evaluating the progress being made in fulfilling the HMP’s goals, objectives, and Mitigation Actions. The objectives of the annual MAT review will be:

- To identify mitigation activities that are in progress, have been deferred, or been completed;
- To assess whether the HMP’s current mitigation goals and objectives continue to address existing (at the time of review) and expected conditions;
- To determine whether or not the nature and/or magnitude of each plan participant’s risks have changed; and
- To determine, by plan participant, if resources are available and appropriate for implementing prioritized actions in the coming year

Any changes made during the annual review process(es) will be noted on the Record of Changes. As part of the monitoring of the mitigation actions, responsible parties will be provided the form below to update the MAT on the progress of strategies that have been implemented.

Integrating the Hazard Mitigation Plan into Other Planning Mechanisms (D3, E2)

The last version of the hazard mitigation plan was not incorporated into other planning mechanisms in a significant way. The previous MAT members took the mitigation actions into consideration when developing and updating other planning mechanisms, but there was not a formal review of the hazard mitigation plan. Going forward, the MAT intends to incorporate the hazard mitigation plan as described below.

Swisher County

Swisher County can implement this hazard mitigation plan in a variety of ways. Implementation of actions will be by presenting them to the Swisher County Commissioners for prioritization. The County Judge will implement actions as funding becomes available via the budget and the pursuit of grants. Swisher County employees, including the EMC’s and Road and Bridge Department, will implement actions into their day-to-day activities as it is possible. Additionally, the County maintains an Emergency Operations Plan (EOP) for the County and Cities within. Emergency management will ensure that the Hazard Mitigation Plan is incorporated into the

EOP. The County will work to expand and improve their capabilities through capital improvements and economic development when possible.

Cities of Happy, Kress, and Tulia

The Cities will implement actions by presenting them to their respective City Council/Commission for prioritization. The City Manager/Secretary will implement actions as funding becomes available via the budget and pursuit of grants. City departments, including the Public Works and Fire Departments, will implement actions into their day-to-day activities as it is possible. The Cities will work to expand and improve their capabilities through economic development and capital improvements when possible.

Happy ISD, Kress ISD, and Tulia ISD

Each ISD employs a maintenance department for their respective campuses. Integration of actions will be presented to their respective Boards for prioritization, but the schools have not formally incorporated the mitigation plan into other planning mechanisms. The ISD Superintendents will implement actions as funding becomes available via the budget, bond, and pursuit of grants. Student and parent education and grounds maintenance will act on actions that can be implemented in their day-to-day activities to mitigate against many of the hazards. The ISDs will work to expand and improve their capabilities through capital improvements when possible.

Swisher County Hospital District

This is the first plan for the Hospital District. The Hospital District will work to incorporate actions via prioritization from the Board of Directors and will look for means of integration with other planning mechanisms. The Hospital District employs a maintenance department for its facilities which could be used for some projects, and the hospital administration will implement other actions as funding becomes available via the budget and pursuit of grants. The Hospital District will work to expand and improve their capabilities through capital improvements when possible.

Element E – Plan Update (E1, E2)

The previous hazard mitigation plan was reviewed by the MAT and updated accordingly considering development trends, the status of previous mitigation actions, and how jurisdictions will be able to integrate the mitigation plan into other planning mechanisms

Development Trends (E1)

Swisher County

The County has seen a slight increase in population in the past 5 years. Since 2019, they have seen the development of two new solar farms. The County's vulnerability has not changed significantly since the 2019 plan.

City of Happy

The City of Happy has experienced a steady population in the past 5 years and has witnessed the development of a café, corner store, and a gas station. The City's vulnerability has not changed significantly since the 2019 plan.

City of Kress

The City of Kress has seen an increase in population since the 2019 plan. The new developments since the previous plan include a welding shop and a café. The City's vulnerability has not changed significantly since the 2019 plan.

City of Tulia

The City of Tulia's population has increased since the 2019 plan. The City has seen significant development. The developments since the previous plan include: a Love's travel stop with a McDonald's attached, 3 liquor stores, a nail establishment, 2 new donut shops, a greenhouse, a sandwich shop, a flower shop, a bank, and a few different restaurants. Due to the large amount of development in the past 5 years, the City is more vulnerable to the hazards identified in this plan.

Happy ISD, Kress ISD, Tulia ISD

The attendance in the ISDs typically follows the same population trends of the County and Cities. Each administration has taken a pro-active approach to hazard preparedness and mitigation, implementing policies and procedures to ensure student and staff safety. Because of this practice, the ISDs are less vulnerable to the hazards identified in this plan.

Mitigation Items from 2019 (E2)

The table below lists the mitigation actions the MAT decided to incorporate into the 2019 plan. Some of these actions have been incorporated into the new mitigation actions above as ongoing or deferred projects, and some have been deleted due to a change in community priorities.

1	Integrate the use of water efficient fixtures, appliances, and systems (e.g. low-flow toilets, faucet aerators, on-demand recirculation systems) into new/retrofit construction projects to reduce water consumption.		
Hazards Addressed	Drought		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District		
Priority	Low	Status	Ongoing

2	Educate the public on mitigation strategies for the below referenced hazards.		
Hazards Addressed	Drought, Hailstorm, Flooding, Lightning, Severe Winter Storm, Tornado, Wildfire, Windstorm		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District		
Priority	High	Status	Ongoing

3	Purchase public alert/warning systems for locations throughout the entire planning area.		
Hazards Addressed	Drought, Hailstorm, Flooding, Severe Winter Storm, Tornado, Wildfire, Windstorm		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District		
Priority	Medium	Status	Ongoing – changed the wording for this mitigation item due to changes in the MAT’s priorities

4	Update the City’s Drought Contingency Plan; integrating strategies to further reduce water consumption cost-effectively.		
Hazards Addressed	Drought		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia		
Priority	Medium	Status	Ongoing

5	Install hail resistant vehicle covering at their facilities.		
Hazards Addressed	Hailstorm, Windstorm, Tornadoes		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District		
Priority	Medium	Status	Ongoing

6	Install hail resistant roofing, HVAC and window coverings on critical facilities/structures.		
Hazards Addressed	Hailstorm, Windstorm, Tornadoes		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District		
Priority	High	Status	Ongoing for the County, the City of Kress and Happy, and Tulia ISD – deferred for the remaining jurisdictions

7	Follow building codes that require construction of safe rooms in new school campuses; and assist where possible, with retrofitting new/existing school campuses with shelters.		
Hazards Addressed	Hailstorms, Tornadoes		
Participating Jurisdictions	Happy ISD, Kress ISD, Tulia ISD		
Priority	Medium	Status	Ongoing for Tulia ISD and Kress ISD, Deferred for Kress ISD

8	Equip newly constructed or retrofitted County or City-owned facilities with a safe room.		
Hazards Addressed	Hailstorms, Windstorms, Tornadoes		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia		
Priority	High	Status	Deferred

9	Install or utilize portable/fixed emergency generators at water distribution facilities, city well fields, and sirens.		
Hazards Addressed	Hailstorms, Lightning, Tornados, Windstorms, Wildfire, Severe Winter Storm		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia		
Priority	High	Status	Ongoing

10	Install outdoor warning system for unincorporated areas within the County.		
Hazards Addressed	Flood, Hailstorm, Wildfire, Windstorm, Tornado		
Participating Jurisdictions	Unincorporated areas of Swisher County		
Priority	High	Status	Combined with mitigation item #3 for this plan

11	Expand and improve the outdoor warning system.		
Hazards Addressed	Flood, Hailstorm, Wildfire, Windstorm, Tornado		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia		
Priority	High	Status	Combined with mitigation item #3 for this plan

12	Improve storm water drainage/control systems; particularly in flood prone areas of the County, City, ISD Campus, by adding, enlarging, cleaning – culverts, bar ditches to direct water to safe discharge areas.		
Hazards Addressed	Flood		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD		
Priority	Medium	Status	Ongoing

13	Develop/maintain a list of Functional Needs residents for the conduction of welfare checks during prolonged winter storm events.		
Hazards Addressed	Tornados, Severe Winter Storm		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District		
Priority	Medium	Status	Ongoing

14	Supply critical facilities with back-up power supply		
Hazards Addressed	Hail, Lightning, Windstorm, Tornados, Severe Winter Storm		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District		
Priority	High	Status	Ongoing

15	Use weather-resistant paving materials on resurfacing/road construction projects to minimize surface damage due to winter storms.		
Hazards Addressed	Flooding, Winter Storms		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD		
Priority	Medium	Status	Deferred

16	Establish & maintain a fire-safe defensible space around critical facilities in sectors in or bordering WUI areas.		
Hazards Addressed	Wildfire, Windstorms		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia,		
Priority	Medium	Status	Ongoing

17	Establish an equipment and personnel share program within the County for fuel reduction.		
Hazards Addressed	Wildfire, Windstorms		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, Swisher County Hospital District		
Priority	Medium	Status	Deleted

18	Participate in Firewise Program through the development of a written wildfire assessment for the City's Wildland-Urban Interface areas.		
Hazards Addressed	Wildfires		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia,		
Priority	Medium	Status	Deleted

19	To work with TxDOT to identify low crossing areas throughout the County and to install signs and gauges in these trouble areas.		
Hazards Addressed	Flooding		
Participating Jurisdictions	Swisher County, City of Happy, City of Kress, City of Tulia		
Priority	Medium	Status	Ongoing

Element F – Plan Adoption (F1, F2)

This plan was formally adopted by Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, and the Swisher County Hospital District after the document had been reviewed by the Texas Divisions of Emergency Management (TDEM) and the Federal Emergency Management Agency (FEMA) to ensure it met current state and federal guidelines governing local hazard mitigation plans.

The evidence of local adoption was sent to both TDEM and FEMA, essentially marking the conclusion of the planning process and the start of the plan’s implementation phase. The plan was adopted as of the dates shown below.

Jurisdiction	Resolution Number	Adoption Date
Swisher County		
City of Happy		
City of Kress		
City of Tulia		
Happy ISD		
Kress ISD		
Tulia ISD		
Swisher County Hospital District		

City of Tulia City Council Adoption

NOTICE TO THE PUBLIC ON THE ADOPTION OF THE SWISHER COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

The City of Tulia City Council will conduct a public meeting before considering final adoption of the recently completed 2026 Swisher County Hazard Mitigation Plan Update on DATE in the City Council Chambers at the Tulia City Hall located at 127 SW Second St., Tulia, Texas, 79088. This plan incorporates mitigation actions intended to minimize the impacts of certain natural hazards on the residents of the County.

The Disaster Mitigation Act of 2000, as amended, requires that local governments develop, adopt, and update natural hazard mitigation plans in order to receive certain federal assistance. A Mitigation Action Team (MAT) comprised of representatives from Swisher County, City of Happy, City of Kress, City of Tulia, Happy ISD, Kress ISD, Tulia ISD, and Swisher County Hospital District, was convened to assess the risks from and vulnerabilities to natural hazards that are endemic to the Swisher County area, and to make recommendations on mitigating the effects of such hazards. The former hazard mitigation plan was adopted in 2019, and should be updated with FEMA at least every five (5) years.

A copy of the Swisher County plan update is now available for review in the County Judge's office, City Halls, School Administration Buildings, or it may be reviewed online at:

https://docs.google.com/document/d/1aHA8FzaR8cp6_pZsfOROpQnOVqaabf6g/edit?usp=sharing&ouid=111380590948595906536&rtpof=true&sd=true

The meeting is open to the public and members of the community are encouraged to attend to offer feedback and comment.

RESOLUTION NO. 2026-03

**A RESOLUTION BY THE CITY COUNCIL OF THE CITY
OF TULIA, TEXAS, ADOPTING THE 2026 UPDATED SWISHER
COUNTY HAZARD MITIGATION PLAN**

WHEREAS, certain areas of the City of Tulia, Texas, are vulnerable and subject to a variety of natural hazards which post a potential threat to the welfare, safety, and property of the City's residents; and,

WHEREAS, to the extent practical, the City of Tulia intends to prepare for and mitigate against such hazards; and,

WHEREAS, under the Disaster Mitigation Act of 2000 (P.L. 106-390), as of November 1, 2004, the Federal Emergency Management Agency (FEMA) now requires that local jurisdictions maintain a FEMA-approved Hazard Mitigation Plan as a condition of receiving certain Federal mitigation grant funding; and,

WHEREAS, the City of Tulia participated in the updating of the Swisher County Hazard Mitigation Plan.

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF
THE CITY OF TULIA, TEXAS, THAT:**

1. The City hereby adopts the 2026 updated Swisher County Hazard Mitigation Plan which will have a five-year lifespan from the date upon which the update is finally approved by FEMA.
2. The City will ensure the updated plan is reviewed at least annually and that any proposed revisions to the City's portion of the Swisher County Hazard Mitigation Plan are presented to the City Council for consideration of approval.
3. The City agrees to take such other official action as may be deemed reasonably necessary to carry out the goals, objectives, and mitigation actions of the updated Swisher County Hazard Mitigation Plan.

CONSIDERED AND APPROVED THIS 13 DAY OF October 2026.

Dusty George, Mayor

Kristina Solomon, City Secretary



Management Info:

Status: Trust

Best Process: Sold Best Process Type:

Progress: Sold pending approval to Mie Budde

Property Info:

City: Tulia

Cad Property Id: 17848 CAD Value: 450

Site Description: S Armstrong Ave, Tulia, TX 79088, USA

Owner Info: City of Tulia, In Trust

Previous Owner:

Legal Description: Lopez Vicenta Cordova

Located on the West side of S Armstrong Ave, South of SW 5th St

Being Lot Fourteen (14), Block Sixty-five (65), Original Town of Tulia, Swisher County, Texas.

Homestead: No Site Structure: No Non Affixed Material: No

Litigation Info:

Case Number: B-13067-21-04

Judgement Date: 02/28/2022 Sale Date: 07/05/2022

Sheriff's Deed Date: 07/08/2022 Redemption Date: 01/14/2023

Court: 242

Style Plaintiff: Tulia Independent School District

Style Defendant: Lopez, Vicenta Cordova

Sheriff's Deed Volume: Volume 2022 Page 0680

Tax Due: No

Delinquent: Yes Litigation: No



Management Info:

Status: Trust

Best Process: Sold Best Process Type:

Progress: sold pending approval to Peggy Gutierrez

Contact adj land owners - looks fenced in by R17846
Alaniz Matilde
408 E 5th Ave
Longmont, CO 80504

Property Info:

City: Tulia

Cad Property Id: 17847 CAD Value: 450

Site Description: Armstrong Ave, Tulia, TX 79088, USA

Owner Info: City of Tulia, In Trust

Previous Owner:
Alaniz Jose Angel

Legal Description: Located on the West side of S Armstrong Ave, South of SW 5th St

Lot Thirteen (13), Block Sixty-five (65), of the Original Town of Tulia, Swisher County, Texas (R17847)

Homestead: No Site Structure: No Non Affixed Material: No

Litigation Info:

Case Number: B-13201-22-06

Judgement Date: 06/02/2022 Sale Date: 07/05/2022

Sheriff's Deed Date: 07/11/2022 Redemption Date: 01/17/2023

Court: 242

Style Plaintiff: City of Tulia, et al

Style Defendant: Owners of Various Properties located within the City Limits of Tulia, Swisher County, Texas

Sheriff's Deed Volume: Volume 2022 Page 0685

Tax Due: No

Delinquent: Yes Litigation: No



Management Info:

Status:	Trust		
Best Process:	Sold	Best Process Type:	
Progress:	Sold pending approval to Peggy Gutierrez		

Property Info:

City:	Tulia	CAD Value:	750
Cad Property Id:	18374		
Site Description:	S Hale Ave, Tulia, TX 79088, USA		
Owner Info:	City of Tulia, In Trust		
Legal Description:	Previous owner: North Darlene Vacant Lot - 0.1700 Acres Second lot SE of the SW 3rd St and S Hale Ave intersection Lot Two (2), Block One Hundred and Twenty-seven (127), of the Original Town of Tulia, Swisher County, Texas (R18734)		
Homestead:	No	Site Structure:	No
		Non Affixed Material:	No

Litigation Info:

Case Number:	B-13201-22-06		
Judgement Date:	06/02/2022	Sale Date:	07/05/2022
Sheriff's Deed Date:	07/11/2022	Redemption Date:	01/17/2023
Court:	242		
Style Plaintiff:	City of Tulia, et al		
Style Defendant:	Owners of Various Properties located within the City Limits of Tulia, Swisher County, Texas		
Sheriff's Deed Volume:	Volume 2022 Page 0685		
Tax Due:	No		
Delinquent:	Yes	Litigation:	No